

# THE LAST AGONY

*Hoosac Tunnel*

OF THE

## GREAT BORE.

**Second Edition.**

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JUN 14 1888

By **F. W. BIRD.**

When "lobbyists" no longer steal,  
And pay for what they stole before;  
When the first locomotive's wheel  
Rolls through the Hoosac Tunnel's bore;—

Till then let Cummings blaze away,  
And Miller's "friends" blow up the globe;  
But when you see that blessed day  
Then order your ascension robe!

— OLIVER WENDELL HOLMES, (altered.)

BOSTON:

E. P. DUTTON & CO., 135 WASHINGTON STREET.

1868.

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The annual interest of our public debt, including premium on gold, is about \$1,294,000 in currency. This amount is to be paid annually by taxation. Ultimately the State will realize from the railroad corporations sinking funds to a sufficient amount to reduce the principal to about \$12,000,000 ; but the State pays the interest on the gross amount above stated, until from these various sources the debt is reduced to \$12,000,000.

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## THE LAST AGONY.

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The tactics of the Ring have again prevailed. Five and a quarter millions for future expenditure, and \$350,000 for annual interest on past expenditures, were appropriated by the last legislature, to be added, with unknown other millions, to the five millions already expended—all to be sunk in that all-devouring maelstrom, the Hoosac Tunnel. "To what purpose is this waste?"

Worse than this. The legislature, having placed careful restrictions and conditions upon the expenditure of the appropriation, their purposes are threatened with defeat by executive appointees. The Massachusetts Bill of Rights, in that grand compendium of the rights of the people, closes with the following declaration: "In the government of this Commonwealth, the legislative department shall never exercise the executive and judicial powers, or either of them; *the executive shall never exercise the legislative and judicial powers, or either of them*; the judicial shall never exercise the legislative or executive powers, or either of them; to the end *it may be a government of laws and not of men.*" Thus the fathers said—thus their children have practised. The design of the following pages is to awaken the attention of the people to a dangerous attempt to put aside this fundamental doctrine.

Before discussing this specific matter, it will be useful to state briefly the financial condition of the State, and more fully the condition of the enterprise in relation to which this alarming invasion of the prerogatives of the legislature is threatened.

The annual interest of our public debt, including premium on gold, is about \$1,294,000 in currency. This amount is to be paid annually by taxation. Ultimately the State will realize from the railroad corporations sinking funds to a sufficient amount to reduce the principal to about \$12,000,000; but the State pays the interest on the gross amount above stated, until from these various sources the debt is reduced to \$12,000,000.

With the exception of about five millions heretofore squandered on the Hoosac Tunnel, this debt was incurred generally for necessary and wise purposes. For any other purposes, the incurring of public debt is a crime; for even these purposes, such a debt is a serious burden—still, it is a burden which the people bear as cheerfully as they may, and they will pay the debt to its uttermost farthing.

With such a debt confronting them, the people had the right to expect that their servants in the legislature would not unnecessarily or unwisely add a feather's weight to this burden. How was this just expectation met?

In the full view of these figures, the legislature authorized appropriations of \$5,250,000 for future work on the Hoosac Tunnel. Is this money to be expended for a necessary or wise purpose?

Before examining this whole matter in its bearings upon the answer to this question, let us see what will be the amount of the burden which this appropriation will impose upon the people. Assuming, for the present, that five millions will complete the tunnel, and in seven years—an assumption which, as will abundantly appear upon full examination, is supremely absurd—to what will the expenditures amount before the work is completed, so as to re-imburse the State to the value of a single dollar, financially or commercially?

Two hundred and fifty thousand of the five million dollars are to be expended previous to October 1, at which time the work is to be put under contract, to be completed in seven years. There will then be \$1,750,000 to be expended in seven years on the tunnel. This gives an annual expenditure of \$678,570, or a semi-annual expenditure of \$339,235. Computing the interest on \$250,000 for seven years from next October, and the interest on each half year's expenditure from the dates of the several periods, we have the following results:—

Expended previous to October 1,	.	.	.	\$250,000 00
Interest for seven years,	.	.	.	128,140 00
Balance of appropriation,	.	.	.	4,750,000 00
Interest of half yearly payments,	.	.	.	719,350 00
				<hr/>
				\$5,847,490 00



Add other expenditures from May 1 to October

1, 1868, say . . . . .	\$125,000 00
Interest for seven years, . . . . .	64,076 00
	<hr/>
Total sum from May 1, . . . . .	\$6,036,560 00

Here, then, is the admitted cost after May 1st. Of course, it need not be argued that the friends of the tunnel would not have proposed an appropriation larger than what they believed the tunnel would cost. Assuming that they honestly believed it would be completed for five millions, they were too shrewd to name a higher sum than they considered necessary. By their own admission, then, it will cost \$6,036,560 to complete the tunnel after May 1. Bear in mind that this amount includes nothing for equipment, station-houses, turn-outs, &c., &c.; nothing for building the road west of the west portal and connecting with the Troy and Boston road, which items will amount to a million more. A double track must be built, which will cost more than another million. These two items would increase the cost to \$8,036,560.\* This is not my estimate of cost, but it is the ultimate cost on the basis of the proposed contract.

Now, compare this admitted cost henceforth with estimates made by the friends of the enterprise in times past. In 1863, Mr. Brooks estimated the entire cost at \$3,218,323. The estimates of other engineers, made for him at the same time, varied from \$3,050,000 to \$3,773,000. Mr. Latrobe estimated the total cost of completing after November, 1866, at \$3,633,640, not including interest. This would add about a million to his

\* For fear it may be supposed that I have put the cost under these two items too high, let me refer briefly to the following facts, which have hitherto escaped notice.

On the Troy and Boston Railroad, near North Adams, there is a tunnel, known as the "small tunnel," some three hundred to five hundred feet long, which is barely large enough to let a train pass through. This must be enlarged to full-sized tunnel.

At the west end of the tunnel Mr. Haupt made a single track excavation about five hundred feet long, and supported it throughout on hemlock timber. At the end of this distance the roof of the excavation broke through to the surface of the ground. Mr. Haupt then excavated an open cut about one hundred feet long down to grade, and put in side walls and a stone arch for that distance, the size being for one track. When Mr. Brooks commenced operations, he raised the grade about six feet, and of course the one hundred feet of stone tunnel made by Mr. Haupt became worse than valueless, because it must ultimately be entirely removed. Meantime the five hundred feet of excavation, supported by hemlock timber, has fallen in, and now scarcely furnishes room for the drainage from Mr. Farren's work. The whole of this must be enlarged and arched, or made an open cut, either of which would be very expensive.



estimate; and yet, after nearly two years of expenditure, amounting to between one and two millions, the friends of the tunnel confess to a cost hereafter nearly a hundred per cent. higher than Mr. Latrobe's estimate two years ago. I refer to this now to show how utterly unreliable are all estimates made by *the friends* of the tunnel. And while upon this topic, I will add the past cost to the admitted future cost, for the purpose of showing that the only estimates approaching correctness have been those made by the opponents of the Commonwealth's assuming this work.

The cost of the tunnel to the State, up to May 1, 1868, as computed by Hon. George Walker, Chairman of the Finance Committee of the House, was \$4,708,110 *in gold scrip*. The interest on this, at six per cent., compounded semi-annually for seven years from October 1, would be \$2,472,000. We have then the following table showing the cost of the tunnel, based upon actual cost to May 1, and cost admitted by its friends after that date:—

Cost, according to Mr. Walker, . . .	\$4,708,110 00
Interest to October 1, 1875, . . .	2,472,000 00
Cost of completion after October 1, . . .	6,086,560 00
Total cost to the State, . . .	<hr/> \$13,216,670 00

This, then, upon the admission of its friends, will be the cost of the tunnel, supposing it will be completed in seven years. Upon this sum the people of the State will be compelled to pay interest, amounting now to \$350,000 annually, and gradually increasing to October, 1875, at and after which date it will amount to about \$660,000 annually *in gold*, or about \$800,000 at present value of currency. We must pay this annual tax ourselves, and we transmit this and the *whole of the principal* to posterity.

Remember, there will be no income to reduce this amount. I throw out the pretended income from the road east of the mountain. It is simply absurd to suppose that such a road can more than pay running expenses. I care not what the contract may be with the corporations which operate it. No railroad corporation will work a road for any length of time at a loss; and when it appears, as it will appear, that, even if the work on

the tunnel is carried through to the bitter end, its completion will not be reached for an indefinite period, these corporations will find or make a loop-hole in the contract—the State will be cheated, as she always has been.

This, then, is the annual burden which the last legislature attempted to fasten upon the people of the State—from \$660,000 to \$800,000—a larger sum than has been appropriated for all the educational institutions of the State, by Colony, Province and Commonwealth, since the Puritans founded Harvard College!

Hitherto I have figured the ultimate cost of the tunnel upon the basis of actual expenditures to May 1, and of the assumption that five millions will complete it. It will be instructive to examine more particularly the estimates which have been made from time to time by the most candid and most competent gentlemen who have considered this subject, and compare them with results subsequently accomplished.

#### ESTIMATES OF COST HERETOFORE MADE.

In 1848, when the charter was granted, the petitioners proved (!) that the road and tunnel could be built for \$3,500,000; that the entire road from Troy to Greenfield (exclusive of the tunnel,) would be built in eighteen months; and that the tunnel itself could be completed, without the aid of shafts, in fifteen hundred and fifty-six working days—just five years! That prediction was made twenty years ago.

I will not produce, in detail, from speeches, pamphlets, reports of legislative committees, &c., &c., estimates and predictions of a similar character, all for a similar purpose, that is, to delude the legislature into granting some favor, and all falsified by events. These statements were generally made by parties directly interested in the tunnel, and on that account, it may be said, were to be received with allowances. Referring to them as only furnishing proof of the general proposition that all estimates heretofore made have proved worthless, we come to the first report upon this subject, to which no exception like the above can be taken, at least, by the friends of the tunnel,—the report of Messrs. Brooks, Felton and Holmes, Commissioners, &c., &c. In that report, (pp. 55, 56 and 57,) their own estimate and those of other engineers are given, of



cost, including interest during construction, of completing the tunnel, as follows :—

Commissioners' estimate,	. . . . .	\$3,218,323 00
Mr. Storrow's	" . . . . .	3,773,368 00
Mr. Latrobe's	" . . . . .	2,837,485 00
Mr. Laurie, with central shaft and hand labor,		3,430,780 00
" " " and machines,		3,050,180 00

The Commissioners' estimate of the entire cost of the road both sides of the mountain and the tunnel, including what the State had advanced previous to 1862, including interest compounded at five per cent. for eight years, also including depot building, shops, rolling-stock, &c., &c., for the entire line, was \$5,719,330.

Among the items, the Commissioners estimate the central shaft, "20 feet in diameter, including machinery, 1,027 feet in depth, containing 11,944 cubic yards, at \$22 per yard, \$262,768." Mr. Crocker's report last year gives the cost of the central shaft, including machinery, up to January 1, 1868, as \$269,924. Of the 1,030 feet, 583 feet have been sunk, costing seven thousand dollars more than the Commissioners' estimate of the cost of the whole. Of course, as the depth increases, the cost, owing to increase of water, extra distance of raising water and material, and increased liability to accident, will be much greater than heretofore.

But, without comparing items, let us compare the total results up to January 1st, with the estimates of total cost. The cost of work done by the State since 1862, has been as follows, with interest compounded at six per cent. :—

Cost for two years to November 1, 1864, (House

Doc. No. 3, 1865, p. 25,) . . . . .	\$415,483 00
Interest from May, 1864, to January 1, 1868, .	100,608 00
Cost from November 1, 1864, to November 1, 1865, (House Doc. No. 4, 1866, p. 53,) .	477,142 00
Interest from May, 1865, to January 1, 1868, .	81,528 00
Cost from Nov. 1, 1865, to Nov. 1, 1866, .	590,904 00
Interest from May, 1866, to January 1, 1868, .	61,249 00
Cost from November 1, 1866, to January 1, 1868, .	603,666 00
Interest from June, 1867, to January 1, 1868, .	21,218 00
Total expenditure by State, with interest to	
January 1, 1868, . . . . .	\$2,351,798 00



It thus appears that of the Commissioners' estimate of cost in 1863, \$3,218,323, very nearly three-fourths, is already spent. What portion of the whole has been done for this money?

The amount excavated has been as follows:—

TOTAL WORK DONE TO JANUARY 1, 1868.

*Tunnel Proper.*

In 1864, . . . . .	750 cubic yards.
1865, . . . . .	4,484 “ “
1866, . . . . .	7,469 “ “
1867, . . . . .	14,410 “ “

*Central Shaft.*

In 1864, . . . . .	1,092 cubic yards.*
1865, . . . . .	1,340 “ “
1866, . . . . .	1,993 “ “
1867, . . . . .	2,698 “ “

*West Approach.*

290 feet, 30 cubic yards per foot, . . .	8,700 cubic yards.†
Total excavation by State, . . .	42,936 cubic yards.

Now the total amount of excavation to be done *at the commencement* was as follows:—

24,862 feet entire Tunnel, (18 cubic yards per foot,) . . . . .	447,516 cubic yards.‡
Add for extra excavation for arching 2,004 feet, 12 yards per foot, . . . . .	24,048 “ “
Central shaft, 1,037 feet, 12 yards per foot, . . .	12,444 “ “

Total excavation at commencement, 484,008 cubic yards.

\* Including 300 cubic yards of earth.

† I am at a loss to know how to fill out this item. Mr. Latrobe (p. 48,) seems to suggest that 10,000 cubic yards have been taken out at the west end. Now, the whole amount of excavation at the east end and the west shaft, working at three faces during the year, has been only 14,410 cubic yards. It certainly is inconceivable that five-sevenths as many yards have been taken out at one face of the extremely difficult material at the west end as have been removed at three faces of good material. I have, however, credited the full amount, allowing 30 cubic yards to each foot of progress. Everything relating to this part of the work is obscure; but I allow an extravagant estimate.

‡ This estimate of 18 yards per foot is based upon the size of the tunnel recommended by Mr. Latrobe and then adopted. I infer that the size has been reduced, as the specifications require sixteen and two-fifths yards per foot. In a subsequent calculation I will give them the benefit of this slight reduction.

Deduct excavation :

By Haupt & Co., (cubic yards,) 28,866	
State, (cubic yards,) . . . 42,936	
	<u>71,802 cubic yards.</u>
Leaving amount remaining undone January 1, 1868, . . . . .	412,206 cubic yards.

It thus appears that the Commissioners estimated the cost of completing the Tunnel, in 1863, at \$3,218,323 ; that there has been expended since then, \$2,351,798 ; that of the whole work, (484,008 cubic yards at the commencement,) 71,802 yards have been excavated ; that is, one-seventh, or  $14\frac{8}{10}$  per cent. of the work has been done, and three-quarters of the estimate is spent.

Or, to take the more correct view of the proportion of work done since 1862,—

Total excavation at commencement, . . . . .	484,008 cubic yards.
Deduct excavation by Haupt & Co., . . . . .	28,866 “ “
	<u>455,142 cubic yards.</u>
Remaining to be done, 1863, . . . . .	455,142 cubic yards.
Excavation by State to January 1, 1868, . . . . .	42,936 “ “

That is, a little over one-eleventh, or nine and four-tenths per cent. of the work has been done in five years, and three-quarters of the estimate is spent.

All the estimates as to the *time* of completing the tunnel have proved equally unreliable. I will not repeat the predictions of its early friends ; *their* longest periods expired long ago ; but come down to the calculations of the Commissioners, in their first report above referred to. After making a detailed statement of expected progress, they say, (p. 61,) that by hand labor alone it would take eleven years and four months to finish the whole work ; but by introducing machines, (p. 61,) the total time would be seven and a half years : and they add : “ It is quite possible that the machine drills may be used in sinking the central shaft, &c. The chances of increased speed from this source are, perhaps, sufficient to counterbalance any delay likely to occur in other parts of the work, and make from seven and a half to eight years a reasonable estimate of the time required to complete the work from the time it is vigor-

ously undertaken." Well, it was "vigorously undertaken" in the summer and fall of 1863. Nearly five of the eight years have elapsed, and, including work done by Haupt & Co., one-seventh of the work is done!

Mr. Latrobe, in his first report, (House No. 30, 1867,) makes an estimate of cost and time of completing. Of course, with the results of five years' work before him, his estimates are made with great caution and with large margins. Time alone can test his estimates as it has those of the first Commissioners. He thinks the tunnel can be completed in eight and a half years from January 1, 1867, and that it will cost \$3,633,640, *not* including interest.

A very brief comparison of Mr. Latrobe's estimates, with actual results of this last year, will illustrate the reliability of any estimates. Mr. Latrobe calculates, (House Doc. No. 30, 1867, p. 77 *et seq.*) that the east end enlargement would be completed in September, 1867. At the time this calculation was made, there were 37,000 cubic yards of excavation to complete the enlargement. The actual amount removed up to January, 1868, as stated by Mr. Crocker, (Senate Doc. No. 20, 1868, p. 9,) has been 4,391 cubic yards; so that instead of the whole 37,000 cubic yards being excavated in eight months, less than one-eighth of the whole was excavated in twelve months. Again, Mr. Latrobe estimates the amount of excavation required to complete the enlargement at the west shaft to be, in December, 1866, 17,040 cubic yards, and that the enlargement can be completed in a year. The actual amount of excavation in the enlargement at the west shaft during thirteen months has been:—

East heading, . . . . .	820 cubic yards.
West heading, . . . . .	1,280 " "
Total, . . . . .	2,100 cubic yards.

Thus, instead of excavating the whole, 17,040 cubic yards in a year, they have actually excavated 2,100 yards, or less than one-eighth in thirteen months.

Again, to illustrate the value of estimates of cost, Mr. Latrobe (House No. 30, 1867, p. 82,) gives the following



## ESTIMATE OF COST.

54,000 cubic yards in enlargements at \$5,	\$270,000 00
325,000 " " heading and bottom, at an average of \$7.50,	2,437,500 00
7,538 c. y'ds in remainder of central shaft, \$30,	226,140 00
1,000 ft. linear at west end, next portal, \$400,	400,000 00
1,000 " " " " " shaft, \$300,	300,000 00
	<hr/>
	\$3,633,640 00

Now the whole amount of excavation since that estimate was made has been, in round numbers, 25,808 cubic yards. The expenditures for that period were \$603,666; giving twenty-three dollars as the cost of each cubic yard of excavation last year, instead of five or seven and a half dollars. The average cost of the whole, was double Mr. Latrobe's estimate of cost of removing the demoralized rock.

I have dwelt upon this, perhaps, unnecessarily long; but it seemed important to show how utterly unreliable all estimates of cost or time have heretofore been, even when made, as those I have referred to were, by the most competent men in the country. Nobody questions, least of all do I question Mr. Latrobe's integrity, impartiality and capacity. If any man could make reliable estimates, he could.

Equally unreliable have been the estimates of scientific experts as to geological developments. Take for instance the following extract from President Hitchcock before the legislative committee, January 31, 1854: "I do not think there will be any masonry or arching required. For instance, if the boring machine should be found to operate well and the tunnel should be bored through the mountain, I do not believe it would require any more masonry for its support than would be necessary for a good sound stick of timber with an auger-hole bored through it." Compare prediction with results. Already over half a million have been spent for extraordinary excavation, masonry and arching at West Approach. It will require as much more to finish it to West Shaft. How much more will be required for similar "unforeseen difficulties" as the work progresses, nobody can tell.

From this examination—and it might be carried to almost any extent with the same results—it is perfectly apparent that

no estimates as to the future are entitled to the slightest confidence; and that the only basis for a reliable calculation of the cost and time of completing the tunnel will be found in the actual results of the work for the last year or two.

The friends of the tunnel surely cannot complain of our adopting the results of these two years as the basis of a calculation for the future. Two years ago they proclaimed that up to that time heavy expenditures had been incurred in making preparations for effective work, but then they were all ready and would show great results during the next year. Last year they were ready, and they assured the legislature that if the ensuing year did not show results justifying their claims, they would give up their case. Well, they have had their trial year, and now, on the basis of the work of this year,

#### WHAT WILL IT COST TO COMPLETE THE TUNNEL?

On page six, we have found the amount remaining undone January 1, 1868, was 412,206 cubic yards.

Now, the expenditure for these fourteen months has been \$603,666; the total excavation, 25,808 cubic yards; the excavation remaining to be done, 412,206 cubic yards. The problem is a very simple one: If the excavation of 25,808 yards cost \$603,666, what will 412,206 yards cost? Answer, \$9,640,000.

But this is not the whole of the cost. It does not include interest. For how long shall the interest be computed? If it required fourteen months to excavate 25,808 yards, how long will it take to excavate 412,206 yards? Answer, 224 months, or eighteen years and eight months!

Now it will not be said that Mr. Crocker has not done all that was in his power. *He* knew the assurances of great progress which were given last winter. He felt as no other man could feel, that his reputation was at stake; and he applied himself for every day and every hour of the time, with enthusiasm, energy and will, for all of which qualities I cheerfully admit he is distinguished, to show great results. That Mr. Crocker has accomplished all that was practicable in pushing the *headings*, I think no one will doubt. As Mr. Latrobe says, "The heading is being pushed wildly on, *under the specious idea that popular favor will be best propitiated by a mere*

*progress in running feet.*" (P. 53. The italics are Mr. Latrobe's.) In the headings, then, Mr. Crocker has undoubtedly done all that was possible. The enlargement might have been pushed more vigorously, and it may be hereafter, until it overtakes the headings. Suppose this is done, and that two more faces are opened, a year or two hence, from the central shaft, and allowing that on these accounts the time, after opening the faces from the central shaft, may be shortened one-half, say to eleven years; dividing the whole cost into eleven equal parts, each part representing the expenditure of a year, and computing the interest on each half-year's expenditure, from the time of the expenditure to the end of the eleven years, compounded semi-annually, and we have the following result:—

Cost, without interest, . . . . .	\$9,640,000 00
Expenditure each year, \$964,000.	
Interest, . . . . .	3,728,690 00
Total cost of completing work undone Jan.,	<hr/>
1868, including interest, . . . . .	\$13,368,690 00

But this is not all. I had almost overlooked the insignificant item of a million or two spent last year, or to be spent hereafter, on the railroad. Indeed, it is not strange that this item should be omitted, for there is not the slightest allusion to the amount expended on the road in the reports. I do not charge an intention to deceive; but I do say, that in an official report to the legislature upon a public work of this character and magnitude, there is not the slightest allusion to an expenditure of nearly half a million dollars. I do not suppose that this omission would not have been discovered by the legislature; but I confess that, though pretty familiar with this whole subject, and perhaps specially suspicious of trickery, this omission did not occur to me until after all my calculations of cost had been made and printed.

In a paper published last winter Mr. Shute states the expenditures on the railroad last year to have been \$371,296. (This amount, added to the amount stated by Mr. Crocker, viz., \$603,666, gives \$974,962 as the amount of money taken from the treasury and expended on the entire work last year!)



Mr. Farren's contract provides for completing the road to the mountain for \$545,000. Of this, \$371,296 having been paid him, we assume that he will finish the road for the balance, \$173,000.

Another item of heavy cost is the building of the road from the west end of the tunnel to the Troy and Boston Railroad. A reference to Mr. Latrobe's report, (pp. 45 and 46,) and Mr. Crocker's, (pp. 17 and 18,) shows that this is to be a very expensive work, made more expensive by the culpable neglect of the Commissioners in not securing the right of way, before the land had so largely increased in price. This road, two miles long, will cost, if ever built, half a million dollars. I put it down, to avoid cavil, at \$250,000.

Again, if the tunnel is ever opened for use, the road must be equipped; and if run by another corporation, it must pay, directly or indirectly, for its fair proportion of the equipment of the whole line. Now the average cost per mile of equipment—that is, for passenger and freight cars and locomotives—in this State is over \$8,000. To do the same traffic, this road must have an equal equipment, that is, for  $42\frac{1}{2}$  miles, \$340,000.

To this must be added, for shops, station-houses, &c., &c., &c., say, at a low figure, \$100,000.

Again, Mr. Crocker says a railroad bridge over Deerfield River near the tunnel, estimated by Mr. Field, chief engineer, to cost \$25,000, (it will probably cost more than double that,) and a common road over the same river, must be built. Put them down as costing only \$30,000.

"A new road up the Deerfield, from the mouth of the tunnel," is a recently discovered necessity, "so important," grandiloquently says Mr. Crocker, "in the development of this section of Massachusetts." One would suppose that the "Deerfield River" was almost navigable above this point; at least, available, when this section is "developed," for water power, whereas it is a mere mountain brook, with hardly water enough in the summer, a mile or two above the tunnel, to turn a child's mimic water-wheel. But this section of Massachusetts is to be "developed." It will next be found to be a political, as well as a financial necessity to build the common roads, as well as the railroads, of Franklin County.

Indeed, Mr. Crocker, (p. 21,) recommends the "improvement of the common road over the mountain," the State nominally to aid other parties; really, in the end, as in the case of the tunnel, to do the whole.

How much will these two, the road up the Deerfield River and the road over the mountain, cost? I don't know. Mr. Crocker has not told us how far up the valley of the Deerfield is to be "developed." We must guess. Call both \$20,000.

We have then the following items of additional cost:—

Finishing of railroad east of mountain,	. .	\$173,000 00
“ “ west of “	. .	250,000 00
Equipment,	. . . . .	340,000 00
Station-houses, shops, &c., &c.,	. . . . .	100,000 00
Bridges across Deerfield River,	. . . . .	30,000 00
Roads up the river, &c., over the mountain,	. . . . .	20,000 00
Total,	. . . . .	<u>\$913,000 00</u>

More than one-half of this amount must be spent at once; the balance might be postponed till near the time of opening the tunnel. It will be fair, then to compute the interest on half this amount, say on \$450,000, for ten years. This, compounded annually, would be \$354,690. We have then the following as the aggregate of the various items of cost of finishing the tunnel and road *from this date*:—

Cost of tunnel and interest, (page 11,)	. .	\$13,368,690 00
Cost of additional items, (above,)	. . . .	913,000 00
Interest on one-half, say \$450,000,	. . . .	354,690 00
Total cost of road and tunnel,	. . . .	<u>\$14,636,380 00</u>

I need hardly repeat that this result comes from premises mainly taken from official reports of the special friends of the tunnel. I have reduced the time one-half from what it would be at the rate of last year's work; I have made no allowance for the additional cost which the inevitable increase of water and other unforeseen difficulties must cause; so far as estimates are made, I have followed the reports whenever they have given us any light, and in other cases have put the cost, as I honestly

believe, fifty per cent. below what will be found to be the actual cost, should the work ever be done; and there is the result.

I am well aware that the friends of the tunnel will exclaim, "These figures are too extravagant to be entitled to a moment's consideration." Such has always been the cry with which they have tried to evade the effect of facts. I have only to reply: For twenty years you have made predictions which have uniformly and grossly failed, and no man not afflicted with tunnel on the brain will place the slightest reliance on any similar predictions from the same parties. Careful, candid men, of large acquaintance with such works, sympathizing with the enterprise, but under no bias which could lead them to hazard their professional reputations by making too favorable estimates, have, from time to time, made estimates of costs; but results have invariably shown the cost to be two to four times larger than their figures. What are we, the tax-payers, to do? Let you go on, after misleading, deluding, humbugging us out of our money, year after year, and place the same faith in your mistaken calculations, your falsified predictions, your broken promises? No, gentlemen; it may be sport to you, but it is death to us. We mean to look this thing in the face. For five years you have had the State treasury at your control. We have given you all you asked for—time and money to fulfil your promises—and if ever the time is to be when we must disenchant ourselves of all hallucinations and appeal to results, the time has come. If five years of work, carried on in your own way, has not brought us to a point where we can test the cost by actual results we shall never reach it; and we must drive on wildly, blindly, at whatever cost, or stop where we are.

I repeat, then, most emphatically, there is no other reliable method of ascertaining the cost of completing the tunnel than by making the past the basis of estimates for the future, and when we take the results of the best year in the past, no charge of unfairness can be sustained.

But it may be claimed that incidental expenses have been proportionally larger last year than they will be hereafter. I take the liberty to doubt. Mr. Crocker's policy has been to show the largest possible results with the least possible expenditure, and accordingly his whole system (if system it can be called,) has been one of makeshifts; penny wise and pound



foolish, carried to such an extent as to call forth the repeated disapproval and rebukes of Mr. Latrobe.

Indeed, a comparison of the expenditures for machinery, buildings, &c., during the last two years, gives the following result: (Report, 1868, p. 23.)

	From Nov. 1, 1865, to Nov. 1, 1866.	From Nov. 1, 1866, to Jan. 1, 1868.
Deerfield dam, . . . . .	\$2,063 00	—
East End dam, . . . . .	266 00	—
Wheelpits and house, . . . . .	24,845 00	\$2,300 00
Gates and overflow, . . . . .	566 00	—
Race, or canal, . . . . .	2,064 00	325 00
Buildings, East End, . . . . .	3,837 00	—
“ Central shaft, . . . . .	2,406 00	1,953 00
“ West End shaft, . . . . .	6,933 00	1,028 00
“ general account, . . . . .	1,842 00	149 00
Machinery, Deerfield dam, . . . . .	523 00	—
“ East End, . . . . .	66,494 00	43,231 00
“ Central Shaft, . . . . .	28,891 00	7,773 00
“ West shaft, . . . . .	20,723 00	17,909 00
“ West End, . . . . .	503 00	36 00
“ general account, . . . . .	43,673 00	1,370 00
Totals, . . . . .	\$205,629 00	\$76,074 00

It thus appears that the expenditures from November, 1865, to November, 1866, for buildings, machinery and appurtenances, were nearly three times as large as the expenditures for the same purposes from November 1, 1866, to January 1, 1868.

Nobody will pretend that the expenditures for the former of these periods were not proper; every building, every piece of machinery, has been since used by Mr. Crocker. There is no pretence that any expenditure was made not absolutely necessary to supply new machinery and buildings as they were needed, or to keep the old in repair; and therefore the inference is a fair one, that Mr. Crocker has reduced the expenditures on buildings and machinery to their *minimum*, and applied every available dollar to pushing the excavation.

But my purpose in copying these figures was to show that there has no unusual proportion of the expenditures of last year gone into buildings and machinery, and, therefore, that the cost of excavation last year furnishes too favorable a basis for estimating future cost. I think any fair-minded man will

say that the cost hereafter will be greater, rather than less, than it was last year, on account of this policy of Mr. Crocker to get all possible work out of the buildings and machinery at the least temporary expenditure.

But this is not all. In the expenditures of last year no charge is made of the value of buildings and machinery burned at Central Shaft. This sad affair, which involved the destruction of two hundred thousand dollars' worth of property, the suspension of the work on the shaft for an indefinite period, and the death of thirteen men, is dismissed by Mr. Crocker (Report, p. 10) in two lines, referring us "for detailed account to Mr. Peet's report herewith." We find no report from Mr. Peet, but an anonymous paragraph in the Appendix (p. 74) informs us that "the fire destroyed the shaft building, machine shop, blacksmith shop, office, saw-mill, wood-shed, together with a large amount of material and machinery, including about five hundred cords of wood and thirty-five thousand feet of lumber, making a total loss of at least \$40,000." Mr. Latrobe (Report, p. 33) refers to it as the disastrous fire which destroyed the buildings and machinery, &c., &c. I assume then that all the buildings and machinery were destroyed, excepting, of course, that parts of the machinery which are not combustible will be worth something. The report says, "The total loss was *at least* \$40,000." There is a great deal of virtue in that "at least."

The cost of buildings and machinery at the Central Shaft is stated in the last report, (p. 23,) to have been, up to January 1, 1868, as follows:—

Buildings, . . . . .	\$13,980 00
Machinery, . . . . .	59,137 00
Total cost, . . . . .	<hr/> \$73,117 00

Add to this the value of the wood, lumber and other material destroyed, and I think it will be agreed that the writer was safe in stating the total loss to have been *at least* \$40,000. This loss, nearer \$80,000 than \$40,000, is fairly to be added to last year's expenditures, when we use those expenditures as the basis of an estimate of future cost.

If any honest man is inclined to believe that the expenditures for machinery, &c., will be less hereafter than heretofore, let him read carefully the reports of Col. Crocker and of Mr. Latrobe, and note the expenditures there foreshadowed. The new flume, new turbine wheels, steam-engines, to take the place of water-power when the water fails from drought in summer and anchor-ice in winter ; machine drills—Mr. Latrobe, (p. 56,) suggests that there ought to be three times as many on hand as there now are at the tunnel ; pumps—the doctors disagree on this matter.

• Whichever system is adopted—Mr. Latrobe's, who comprehends the magnitude of the enterprise, and who would adopt a system which shall be most effective and most economical in the long run ; or Mr. Crocker's, whose system is one of temporary expediency, running for luck, aiming to show great immediate apparent results, believing that every additional appropriation made by the State increases the probability that she will keep on—whichever system is adopted, everybody knows that the cost of maintaining, repairing and replacing machinery, worked as all machinery performing such service must be, is very great ; and however Mr. Crocker may strive to present only the bright side, the fact is, that hereafter the legitimate annual expense for machinery will be greater than the average for the last five years, (omitting the Deerfield dam as strictly exceptional.)

But even this calculation, with its frightful result, is made upon a basis too favorable to be applied to future operations. About one-third of the excavation last year was done by Dull, Gowan & Co., under contract. Of the whole 25,808 cubic yards, Dull, Gowan & Co. removed 2,944 cubic yards of heading and 4,391 yards of enlargement,—total, 7,335 yards,—for which, under their contract, they were paid \$53,110, averaging \$7.24 per cubic yard, while the work done under Mr. Crocker cost \$29.70 per cubic yard.

• Deducting the amount paid them from the total expenditure of the 14 months, \$603,666—\$54,110=\$550,556, which is the amount it cost the State to excavate 18,473 cubic yards. The question of the cost of completing the tunnel on this basis would be answered by the solution of the following problem : If 18,473 yards cost \$550,556, what will 412,206 yards



(remaining undone January 1, 1868,) cost? Answer, \$12,285,000, without interest!

Of course the work done by Dull, Gowan & Co. is fairly chargeable with its proportion of contingent expenses borne by the State, and this would increase the cost of that portion of the year's work, and diminish proportionately the cost of the portion done by Mr. Crocker, and thus bring the cost of completing the work, on the basis of work done by Mr. Crocker last year, somewhat below this sum.

In another respect, certainly, the cost of the *whole* work of last year, gives too favorable a basis for future calculations. Over one-third of the work of the year was done at *prices below cost*,—so much below as to *break down the contractors*. It would be clearly unfair to claim that the work hereafter can be done as low as it was done last year, when over one-third of last year's work was done below cost, under a contract made with able, energetic men, who struggled desperately to make their ends meet, and failed. And yet Mr. Crocker is using the result of the labors of men who worked for the State to their own loss, to prove that hereafter *he* can carry on this work to an early completion, while his own work cost the State at least three times as much per cubic yard as that done by the very men whose work at ruinous prices he makes the foundation of his claim to triumphal achievements in the future.

Of course it is unfair to compare Dull, Gowan & Co.'s work with a portion of that done by Mr. Crocker, as some portion—the west approach, for instance—was much more costly; and for this reason it will not do for Mr. Crocker to claim that he can complete the tunnel at the price per yard paid to Dull, Gowan & Co.

Hitherto, I have calculated only the cost of completing the tunnel from January 1, 1868. My aim has been to confine attention to the single question, Is the tunnel worth finishing to-day? Is it better to lose what we have expended, or to expend ten or fifteen millions more, and in the end lose the whole?

But this record of folly would be incomplete if we omit the entire cost *to the State* of this enterprise from the beginning. The first report of the Commissioners, (p. 23,) gives the net amount, principal and interest, of the advances, by the State

up to January 1, 1863, as \$968,862. The sums expended from that time to January 1, 1868, were as follows:—

In 1863, (one-half of two years, \$415,483,) .	\$207,742 00
1864, . . . . .	207,742 00
1865, . . . . .	477,142 00
1866, . . . . .	590,904 00
1867, . . . . .	975,514 00
	<hr/>
	\$2,459,044 00

The interest on the advances from January 1, 1863, and on the expenditures from their dates respectively to the time we have estimated for the completion of the tunnel, January 1, 1879, amounts to \$3,516,000.

We have then the following as the

TOTAL COST TO THE STATE OF ROAD AND TUNNEL FROM THE  
BEGINNING TO ITS COMPLETION.

Amount of advances to 1863, . . . . .	\$908,862 00
of expenditures from 1863 to 1868, . . . . .	2,459,044 00
Interest on above, to January 1, 1879, . . . . .	3,516,000 00
Cost of completing, from January 1, 1868, (ante, p. 16,) . . . . .	14,636,380 00
	<hr/>
Ultimate cost to the State, . . . . .	\$21,520,286 00

And this estimates for a single track only. Another track will add, for construction and iron, nearly a million more.

This is the entertainment to which we are now invited by the men who originally humbly asked the State for the privilege of "building their own road with their own money."

I am aware that the figures representing the ultimate cost of this work are startling compared with the confident assertion of the tunnelites; they seem too extravagant for credit. But I challenge the most captious critic to detect a flaw either in the premises or the result. I have shown that all the predictions of the friends of the work have been falsified, their estimates of cost have been exceeded five to tenfold; that the actual expenditures have uniformly exceeded the most careful estimates of engineers, fair-minded and scientific experts, fifty, a hundred,

two hundred per cent. I have taken the past as the only reliable basis, and the last year as the most favorable year. I have shown why the result of last year's operations was more favorable than can reasonably be expected hereafter, for three reasons:—1st, Because over one-third of the work was done for less than cost; 2d, because under Mr. Crocker's makeshift policy, the depreciation of machinery has not been provided for; 3d, because, inevitably, as the tunnel progresses into the mountain, the cost, from increase of distance, water, and other hidden difficulties, *must increase*. I have, however, added nothing to the cost hereafter on these accounts, but have calculated it on the basis of last year's work, and there is the result; and I defy criticism. Clamor, glamour, hallucinations, will no longer avail. Let the friends of the tunnel point out the mistake in these figures, or let them honestly state that they ask an appropriation this year, for the prosecution of a work which must cost the people of this State from this time forward, principal and interest, from twelve to twenty millions of dollars.

We come now to an important element of cost in this work :

#### HOW LONG WILL IT TAKE TO FINISH THE TUNNEL?

Here again, we must discard all predictions. Twenty years ago it was to be finished in three to five years. Mr. Brooks estimated from seven and one-half to eight years. Five years have gone, and thirteen and one-third per cent. of the whole has been done. Mr. Latrobe calculated last year that it could be "finished in eight and one-half years from January 1, 1867." Well, we have since then the result of fourteen months of active work, driven as it never was driven before, viz.: during these fourteen months, one-seventeenth, or  $5\frac{9}{17}$  per cent. of the work undone Nov. 1, 1866, has been done; which would give for one year's work at the same rate, a trifle over five per cent. of the whole. These calculations show how utterly unreliable any estimates are as to time, as well as to cost.

Taking, then, last year's work as the basis of calculation for the future, we arrive at the following result. On the first of January, 1868, there were 412,306 cubic yards of rock to be excavated. In fourteen months, they had removed 25,808 yards, which would give for twelve months 22,110 yards. If it took one year to remove 22,110 yards, how long would it take



to remove 412,306 yards? Answer, two hundred and twenty-four months, or eighteen and two-thirds years. Now, the victims of tunnel on the brain may scout at these figures; but the premises are undeniably correct, and the logic is irresistible.

But assuming as we did in calculating the cost, that, by working two additional faces at the Central Shaft, and increasing the force upon the enlargement, they double the progress, (it will be three years before the Central Shaft reaches grade, even at the rate of progress of last year,) this will carry them through in twelve or thirteen years; and this, upon their own premises, with their own results, is the shortest possible time for the completion of this new avenue for the wealth of the West to Massachusetts—this is the result of the method of the Railway King to meet the immediate exigency for the commercial necessities of Boston!

We come now to the most important question, perhaps, of all:

#### WHAT WILL THE TUNNEL BE WORTH?

I admit that if it can be shown conclusively or even reasonably that this road will be worth all it costs, all my figures about cost are wasted. If it were clearly shown that as an investment the tunnel would pay, the State might have some justification for undertaking it. Or, if the opening of this route would develop the resources of this State, or if it reached new fields of wealth or traffic in other States, and thus brought new business to Massachusetts, I agree that these advantages might be of such magnitude as to render its construction by the State comparatively unobjectionable. Can either of these propositions be maintained?

#### WILL THE TUNNEL PAY AS AN INVESTMENT?

The question is answered before it is asked. If the road to the Hudson River through the tunnel should ever be opened, it must compete, *as an entire line, for through freight*; which, its friends admit, must be its main reliance, with the Boston and Albany road and other lines bringing Western traffic to Boston, and of course cannot charge for through freight, to or from Troy, higher rates than the other roads charge for similar traffic.

The Boston and Albany road will have cost, with double track, \$17,500,000, or nearly \$90,000 per mile; and considering it solely as a matter of dollars and cents, the managers graduate their tariff for freight and passengers with reference to fair dividends on that sum, and no road can compete successfully with that road if they charge higher rates. Of course, then, unless it can be shown that the traffic will be larger on the tunnel route than on the Boston and Albany, the tariff must be substantially the same on each line.

In arranging the division of receipts between the different roads composing the tunnel line, each road must receive its proportion according to *its length*, and not according to *its cost*. The connecting roads may now, *for a purpose*, make professions of a willingness to allow the Troy and Greenfield road more than its proportional share of the income; but this will last only till the State is in so deep that she must go through. In the end this line will be managed just as all similar railroad lines in the world are managed—each road will receive its share of income in proportion to its length, and no more.

It is fair to assume that the tunnel line, if finished through, will cost, (not including the tunnel,) about the same as the Boston and Albany road, \$90,000 per mile. This is about the average of well-equipped double-track roads in Massachusetts. In the division of receipts with connecting roads, the Troy and Greenfield road would be entitled to  $\frac{42}{191}$  of the income of the entire line, and its whole income could pay a dividend only on the fair cost of its road as compared with other roads—that is, to a dividend on \$3,800,000. All that the tunnel costs, over this amount, on this theory, will be dead loss.

I need not say that this calculation assumes half a dozen favorable elements which do not and never will exist in this case. It assumes that the local traffic on this forty-two and a half miles will be the same as on the rest of the line and on competing roads; it assumes that at the start the through traffic will be the same on this line as on the Boston and Albany; it assumes that, with a half a dozen lines competing for Western traffic, a link in this line, with an entirely insignificant local traffic, can derive a remunerating income from through traffic alone.

But I waste time in showing what even its friends admit, that the tunnel can never pay as an investment, and that every dollar put into it by the State will be lost. But the opening of another avenue to the West! The pouring of the products of Western prairie and forest into Boston, making her the commercial metropolis of the continent! Let us look at this soberly. We have been humbugged long enough.

The simple question is, Is there any exigency for another railroad to connect the New York Central Railroad with Boston?

#### THE COMPARATIVE LENGTH OF THE ROUTES.

It seems to have been taken for granted that there is a large saving in distance by the Tunnel route, over the Western. As a specimen of these disingenuous—I will not say dishonest—attempts to mystify the public on this point, look at a table of distances given by Hon. Alvah Crocker, in a speech in the Senate in 1862. True, he states that it is “a table of distances *from Troy* ;” but the table is got up to show the advantage of the tunnel route over the Western, and the design is to give the impression that it is a fair statement of the relative merits of the two routes in this respect. Otherwise, the table has no meaning. Thus he gives the distance “to Boston, *via* Western Railroad, 208 miles; *via* Troy and Greenfield, 189 miles.” Most people would understand this to mean that Boston is nineteen miles nearer to the West by the tunnel route than by the Western. The rest of this table is equally deceptive, or more so.

Now, the competing point is Schenectady. All the through traffic for both these routes comes to that point. Thence it is brought either by the New York Central road to Albany, for the Western road, or to Troy, for the tunnel route. The distances from Schenectady to Boston are,

From Boston to Schenectady, by Tunnel line,	212 miles.
From Boston to Schenectady, by Western line,	217 miles.

The tunnel line is five miles shorter; but this difference, as a matter of time, would be nearly offset by the reduced speed at which trains would be obliged to run through the tunnel; more than offset so far as passenger trains are concerned.



## WILL THE TUNNEL ROUTE OPEN A NEW TRAFFIC ?

Will it tap the West at a different point from existing routes ? If it established a connection with a new line of railroad, or with the traffic which reaches the seaboard by way of Lake Ontario, it would be a great point in its favor. But confessedly, it does nothing of the kind. It simply goes to Schenectady, and then asks the New York Central road for a share in the traffic which otherwise would come through Albany to Boston. Clearly, then, the tunnel can make no pretensions that it will bring an additional ton of Western freight to Boston, *provided the Western road has capabilities for bringing all that offers.*

In dealing with this matter, we are to consider only the question whether the Western road is capable of bringing *eastward*, from Albany, all the traffic that seeks Boston.

I am not considering what the Western Railroad has done with a ferry at Albany, with forty miles of single track, with its present equipment and *under its present management*; but what it is *capable of doing* with a bridge over the Hudson, with a double track all the way, and under a management fully alive to the duty of making available the highest resources of modern railroad science and of meeting the commercial exigencies of the day.

With a double track, and with an adequate equipment, there is hardly a limit to the capabilities of a railroad. Thus the Pennsylvania Railroad is to-day taking freight trains of two hundred and forty tons each over its road, with a grade of 95 feet to the mile for fifteen miles ; whereas, the maximum grade on the Western road eastward is  $75\frac{1}{2}$  feet to the mile for seven miles. This load of 240 tons is the gross weight of cars and freight, exclusive of engine and tender. Freight cars, well filled as through cars always are, constitute something less than fifty per cent. of the gross weight of the train. This will give something over fifty per cent. as the proportion of paying freight. Calling the net freight as fifty per cent. of the whole load, and we have 120 tons of paying freight to each train. On a double track road, with double the number of passenger trains now run by the Western road, freight trains can be run every twenty minutes and keep out of the way of passenger trains. We will estimate for a freight train each half hour.

This will give 240 tons of freight per hour, 5,760 tons per day, and 1,797,120 tons in the year of 312 working days. This is eleven times the amount of freight (162,638 tons,) brought eastward by the Western road last year.

But this calculation assumes that freight engines are used of the same size, or but a trifle larger than those now used on the Western road; whereas, engines are now built, specially adapted to heavy traffic, which will carry nearly double the load above stated. The introduction of them would increase the capacity of the Western road to over three millions of tons eastward annually. Practically, there is hardly a limit to the freighting capabilities of a double track road with adequate equipment.

But cavillers may say, "These are estimates; give us results actually accomplished." They are estimates; but their correctness cannot be disputed. However, here are facts. The New York Central road, with a local traffic probably three times as large as that of the Western Railroad, brought to Albany in 1866, 600,000 tons of through freight. What hinders the Western road, with double track and fully equipped, bringing the same amount of freight to Boston? The Pennsylvania Railroad, crossing the Alleghanies with heavy grades, carried about 2,600,000 tons of freight eastward, and the capacity of that line, in the estimation of the directors, was 6,000,000 of tons! These are *facts*; and what this road can do, the Western can do.

But the old bugbear of the high grade on the Western road. Of course, no one denies that the tunnel line has this advantage; that its maximum grade going east is somewhat less than that of the Western. But this is only a question of increased cost of freight. With auxiliary power used on the five miles of maximum grade near Pittsfield, this disadvantage would be entirely overcome. With this overcome, the Western line is exactly equal as to grades, (in curves it has the advantage,) to the tunnel line. What will it cost to put these two roads on a par in this respect?

It reduces itself simply to the cost of auxiliary power to haul the freight up the five miles of maximum grade. Throughout the rest of its entire line, the Western road is in

every respect equal, and, as to curves, superior to the tunnel line. Indeed, the commissioners in their first report admit that the engineering characteristics of the two lines are practically equal. They say, (p. 67,) "With all the improvements likely to be made in the line through the Deerfield Valley, there will probably remain more curvature, strong enough to be embarrassing to quick trains, on this than on the Western route, perhaps enough to equal the disadvantage of their heavier grades, which, for passenger service, are not a very serious obstacle." Mr. Laurie says, (p. 208,) "The great amount of curvature of small radius on the T. & G. Railroad would *more than offset* the shorter distance by that line, and I have no doubt that the Western road can be run over *in the same time* and *with greater safety* than the tunnel route." What, then, will be the

#### ANNUAL COST OF AUXILIARY POWER

for these five miles?

I submitted this problem to a friend who is an accomplished engineer, who replied as follows:—

"The problem given by you, if I understand it aright, was to determine the cost of an assistant engine on five miles of 75 feet grade, and the number of tons that could be passed, allowing thirty minutes between trains. The cost of a first-class engine, with engineer, fireman, fuel and repairs, was formerly covered by about \$20 per day. Owing to the large increase in all expenses, we will call it \$40. Cost per day of engines, \$200. The capacity would not be less than 1,500,000 tons.

"The cost of the assistant engines would be  $\$200 \times 300 = \$60,000$ , allowing for interest on cost of reserve engines, extra wear of track, &c., \$20,000; total, \$80,000, to cover all contingencies.

This estimate, it will be observed, gives \$80,000 as the extra cost for auxiliary power for 1,500,000 tons; that is, it will cost to bring 1,500,000 tons of freight to Boston by way of Albany \$80,000 more than it will to bring the same amount of freight to Boston by way of Troy—nearly ten times the largest amount of through freight ever brought in one year from Albany to Boston. And this constitutes the whole of the exigency for building another railroad to connect with



the New York Central Railroad. Not another through passenger will be brought to Boston nor a cent cheaper; not another ton of through freight will be brought to Boston; but a traffic ten times larger than the highest yet known can be brought to Boston for \$80,000 per year—which is the interest of \$1,333,333. To save this sum of \$80,000 per year, the State is asked to build another road, which will cost in the end an amount, the annual interest of which will be over a million of dollars! The people of this State are to be taxed over a million dollars yearly to save \$80,000 yearly!

The New York Central Railroad carried last year, *in both directions, through and local*, 1,600,000 tons of freight—all told. I have not the statement of the proportions of through and local freight; about one-quarter of the whole has heretofore been about the proportion of eastward through freight. This would give about 400,000 tons of eastward through freight on the Central road last year. The Western road could have brought the *whole* of this to Boston for an additional cost of \$25,000. Does this constitute an exigency for building the tunnel,—to bring a fraction of this freight to Boston?

To illustrate the absurdity of this claim of the friends of the tunnel, that this road will bring new traffic to Boston, I ask attention to a few facts.

Flour, wheat, corn and other products of the West are being delivered via Ogdensburg and Lowell Railroads, *alongside of vessels in deep water in Boston Harbor*, from Chicago and other Western shipping points, for \$6 per ton, or sixty cents a barrel for flour; while it costs \$11.66 per ton, or 97¼ cents per barrel to get grain and flour from the same places to Albany or Troy—that is, to the point where the tunnel road is to seek its business.

By the same route, merchandise from Boston is being delivered at Chicago and other shipping ports West for less than \$10 per ton; while *from Albany* to the same points it costs more than \$30 per ton, (the exact figures being \$1.49 per hundred pounds from Boston to Chicago, or \$31.84 per ton.) These two statements prove the absurdity of expecting to bring to Boston *for export* any considerable amount of freight *by way of Albany*.

During a large part of the season more freight is sent from Boston to the West than is offered or can be obtained from the West for Boston, and the railroads are much of the time obliged to haul *empty cars East*, to be loaded at Boston for the West. If there is not now freight enough coming East to fill the cars on existing lines, how stupid the folly of the State building another road to bring Western traffic to Boston.

The Boston and Albany Railroad, which seeks its business at the same point where the tunnel road, if ever completed, will terminate, has not now and cannot find business for more than *one-tenth* of its capacity; and it can, of course, bring to Boston all the freight that the connecting roads beyond can bring to it.

All freight coming down the Erie Canal, and intended for export, is towed down the Hudson River to New York for less than the *cost* of simply *loading* it on board the cars at Albany. Of course, no canal-borne freight *for export* will come to Boston over the tunnel line. Indeed, none comes now over the Boston & Albany. Hence the tunnel line can only divide the traffic which comes over the New York Central road.

The report of the Bureau of the Board of Statistics shows that the whole of the *surplus product* of the country, from California to Maine, which could, under the most favorable circumstances, be used for export, does not exceed fifteen hundred thousand tons, (1,500,000,) and this amount of freight, if distributed over the various railroads leading to tide-water, would not pay even their *running expenses*.

The increase of population is much more rapid than the increase of production. There is therefore each year less freight offering for export.

It is very sad, very humiliating, that while Maine is reaching one hand Eastward to grasp the rich traffic of the Provinces, and the other Westward, projecting and perfecting *feasible* lines to Western traffic, Massachusetts is allowing her child to outstrip her, while she squanders millions in constructing a road which will be utterly worthless as an avenue of Western traffic.

I have tried to show the utter folly of building a railroad solely for the purpose of competing at Schenectady for a traffic, every particle of which will come to Boston if the tunnel is never built. But a new hallucination was conjured up last winter, viz.:

## THE ATLANTIC AND ONTARIO LINE.

Mr. Edward Crane stands godfather to this bantling and advocates it with all his usual enthusiasm. Mr. Crane sees very clearly that the idea of building the tunnel to bring Western traffic to Boston is sheer folly; for he says, "When you strike the Hudson where barges or steamboats will float, and tugs take boats to New York, there is a cheaper transit to tide-water, and you may build all the Hoosac Tunnels you please, and your money will be where you put it, bearing no interest." (Call you that backing your friends?) What then? He goes on: "The point of commercial competition is not at Newburg, not at Albany, not at Troy, but *on Lake Ontario at the point nearest the seaboard*. A line of three hundred and sixty miles from Boston, via Hoosac Mountain, Eagle Bridge, Saratoga, to the best port on Ontario, shows the point of commercial competition for all time."

Now, in the first place, after the road is built from Saratoga to Lake Ontario, what is to prevent the traffic going from Saratoga twenty odd miles by rail to Albany, and then one hundred and fifty miles by water to New York, which he admits is "cheaper than by any other method," instead of going from Saratoga by rail two hundred and twenty odd miles through the tunnel to Boston?

Again, the traffic for this road is to come through the Welland Canal and over Lake Ontario, both of which are closed by ice six months in the year!

Again, who is to build the road from Saratoga to Oswego? Mr. Crane knows full well that New York will not invest a dollar in a road, the purpose of which is to bring Western trade to Boston. He knows, too, as everybody knows, that Massachusetts capitalists who have refused to aid the tunnel will not invest fifteen or twenty millions of dollars in a similar enterprise *outside of the State*.

Let us look at this scheme for a moment, soberly if we can. I don't know what Mr. Crane means by a railroad from Saratoga to Oswego. The line for such a road must run south of the mountainous region which almost touches the Central Railroad thirty miles west of Albany and extends to Lake Ontario, within a few miles of and parallel to the Central road nearly to Oswego. A road from Eagle Bridge over this route is simply



an absurdity. I conclude he must mean the Saratoga and Sackett's Harbor route. This line runs for a hundred miles, more or less, through the "New York Wilderness," a region almost inaccessible, explored rarely by hardy trappers, with an occasional lumberman's shanty on a lake or river—a country which will never be settled until chaos is over-populated. I know something about this region and this railroad route. I have shot many a deer in its forests, caught many a trout in its lakes and rivers, and "shantied" in the railroad surveyors' cabins; and, freshly as I recollect the tortures I endured from mosquitoes, black flies and punkies, I am comforted in reflecting that I did not bring upon myself still greater suffering by investing, as I was urged to do, in the Saratoga and Sackett's Harbor Railroad. Fourteen years ago—how much longer I know not—it was pushed "vigorously." Enthusiastic but not very far-seeing capitalists were drawn into it; hundreds of thousands, perhaps millions were sunk; millions of acres of lands were bought by its friends, a large portion of which has reverted to the State for non-payment of taxes; time and again it changed hands; all its projectors lost all they invested, and all that came of it was some fifteen or twenty miles of worthless railroad from Saratoga towards Sackett's Harbor. I do not believe there is much danger that Massachusetts will resuscitate this defunct concern, or that the suggestion of this scheme will materially influence the judgment of our legislators in deciding upon the expediency of continuing work on the Hoosac Tunnel.

In a late "North American Review," Mr. Charles Francis Adams, Jr., has an interesting paper on "Boston," in which he discusses this tunnel question with judicial clearness and fairness. I might take exception to the statement that "the construction of such a road (from Saratoga to Sackett's Harbor,) would be both feasible and cheap." Feasibility is a relative term; so, perhaps, is cheapness; but as compared with New England railroads, this road could hardly be cheap. The route runs for over a hundred miles through the New York Wilderness, a region literally covered with mountains, lakes and rivers; with no valleys or level lands that are not covered with water. Coming east, there is one continuous grade, forty to fifty miles long, some forty or fifty feet to the mile, through a country of

the most difficult engineering, and where the construction of any railroad, and especially of one fitted for a large traffic, must be very expensive. Still, money would build it, and therefore it is feasible; and if there were sufficient object, it might in the end be cheap. Is there an adequate object? Mr. Adams answers this question very conclusively in the following extracts, (pp. 575 and 576:—)

“To the Bostonian, however, one doubt suggest itself: Would that movement be to Boston, or would it be to New York? The eastern terminus of the proposed line is Saratoga, and Saratoga is alarmingly near the head-waters of the Hudson,—is already connected by railroad with Troy.

“By whomever built, owned, or managed, the proposed road must be no less open to freight moving from Saratoga to New York than from Saratoga to Boston.

“So far as this road is concerned, therefore, Saratoga and Troy must be considered as one, and both as placed at the head-waters of the Hudson,—that river so fatal, which always will flow to the sea. This plan, therefore, while it is brilliant and deserving of careful consideration, while it promises rich returns for the outlay it demands, while to the West it is of the first importance, cannot be considered as undoubtedly tending to the commercial development of Boston. It is more likely to bridge the peninsula from Ontario to the head-waters of the Hudson than from Ontario to tide-water.

“This is certainly the view taken of this project by enterprising New Yorkers. It entered into the discussions of the Detroit Convention in 1865, and Mr. Littlejohn, there representing New York, said of it: ‘The nearest point on Lake Ontario to the Hudson River is Sackett’s Harbor, and next Oswego. From one or the other of these points, private enterprise will soon construct a double track railway to Troy or Albany. A propeller of fifteen hundred tons could leave Chicago and reach the lower end of Lake Ontario in six days. A train could be loaded up by an elevator from the vessel and despatched every two hours, which would take from 200,000 to 250,000 bushels to the Hudson River in every twenty-four hours. The cost of transferring the grain from the vessels to the cars would be but a quarter of a cent per bushel, and the law of gravitation would carry it into the barge at Troy or Albany, and another day would put it on board the ship for Liverpool.’ It may well, therefore, be questioned whether Boston should now turn her attention to the construction of new and dubious lines of communication. While the lines already constructed are but half finished, and

not utilized to a tenth part of their capacity, she may find in their instant development ample field for enterprise and investment of capital.

“To their consolidation and enlightened management she may well direct all her superfluous energies for the next five years. She had best fight it out on that line.”

I think that every fair-minded man will admit that I have established these propositions: that the completion of the tunnel *from this* time will require ten, fifteen, twenty millions—nobody knows how much; that nearly every dollar of this money must be raised by taxation; that the largest through traffic which can ever be expected for this line, competing as it must with half a dozen rival lines, can never give more than the ordinary income of forty-four miles of road at the ordinary cost, \$3,000,000, and thus the cost over that amount will be an absolute loss; that there is no pretence that this road will ever bring a dollar's worth of through traffic to Boston which cannot come by existing lines at an insignificant cost, unless the State builds a railroad from Troy to Oswego or Sackett's Harbor, at a cost of fifteen or twenty millions; that the traffic over such a road, if built, could equally well come to Boston over the Boston and Albany road, or would, more probably, go to New York; and worse than all, that the connections of the State with a work of such magnitude debauches her politics and legislation. How, in the face of these facts, could the legislature of 1868 sanction the farther prosecution of this work?

Without a doubt, a large majority of the House was honestly opposed to any farther appropriations for the tunnel. This conclusively appears from the vote on Mr. Dana's amendment, striking out the appropriation of \$600,000, even after the extraordinary appliances of lobbying and log-rolling which, for five months, had been brought to bear upon members. A brief history of the action of the House will throw light upon the subject.

#### TUNNEL LEGISLATION OF 1868.

The first bill (House Doc. 339,) reported by Mr. Francis, of Lowell, in behalf of a majority of the Committee, provided, in section one, for appropriations of \$250,000 for the completion of the railroad, \$600,000 to be applied to the tunnel, and



\$350,000 to the payment of interest. Section two authorized the governor and council "to contract with any corporation for the completion of the road and tunnel, and to dispose of the interest of the Commonwealth in the same, and in the Southern Vermont Railroad, upon such terms as they may deem for the best interests of the Commonwealth." The bill was referred to the Finance Committee, and reported back without any recommendation. Mr. Richard H. Dana, Jr., offered an amendment, striking out the appropriation (\$600,000,) for the tunnel. This was carried by a vote of 114 yeas to 95 nays. (The yeas and nays are given in the Appendix.) Immediately after this vote, at the same session, the following amendment was adopted *by the same House*, by a vote of 120 yeas to 87 nays:—

*"Provided, That after the first day of October next, no part of this appropriation shall be used in payment for work done in excavating the tunnel, unless the same be done under contracts approved by the governor and council; and they are hereby authorized to contract for the whole work of constructing the Hoosac Tunnel: provided, that a contract, [with satisfactory guarantees,] can be made for the completion of the same within a period of seven years and at a cost not exceeding five millions of dollars."*

The words in brackets were afterwards inserted.

This amendment was offered by Mr. DAN PACKARD, of Abington. This was accompanied by two additional sections, one providing for issuing scrip for the five millions, the other abolishing the board of commissioners after the contract shall have been made, and providing for the appointment of a superintending engineer.

This was truly "taking the bull by the horns," and illustrates the audacity of the tunnelites in thus changing front under fire, and facing the House which had just voted down an appropriation of \$600,000 with a proposition for an appropriation of five millions!

The only plausible explanation of this sudden change is that this amendment proposed that the work should be done by contract. The time had come for a change of tactics. The friends of the tunnel were convinced that the House would not make appropriations for a continuance of the work under

the present management or on the present system. A new dodge must be invented. Always in the past, when the results of any particular management or system became developed, and sensible men saw that the enterprise was ruinous, its friends have suddenly discovered that the management or system was bad, and have promised the most flattering results from a change of one or both. The last panacea—absolutely the forlorn hope of the tunnelites—was the contract system. Had opportunity been had to expose the folly of any expectation of better results from putting the work under contract, that humbug would have been exploded, and the House would have adhered to its original purpose. Unfortunately, the beauties of the contract system had been extolled by Mr. Shute and others, and the House was caught in the trap. I shall expose this delusion hereafter; meantime I resume the history.

Various amendments were proposed, the action upon none of which bears materially upon the main issue. The bill passed to a third reading by a vote of 111 yeas to 92 nays. (The yeas and nays are given in the Appendix.)

When the bill came up for engrossment, it was perceived that there was no security for the fulfilment of the contract; that no bidders could be found who could or would give “satisfactory guarantees” to complete the work for five millions. The following amendment was therefore proposed by the friends of the tunnel:—

“And *further provided*, that in case a contract should be made by the governor and council for the completion of the tunnel, there shall be withheld from payment under said contract a sum not less than one million dollars, until the final completion of said work and the acceptance of the same by the governor and council.”

This perfectly illusory pretence of security furnished to those members who wanted a pretext for voting for the swindle an apology for violating their own honest convictions, or outraging the wishes of their constituents.

The bill passed to be engrossed by a vote of 105 to 96, and to be enacted by a vote of 115 to 91. (These votes will be analyzed in the Appendix.)

Of the action of the Senate nothing need be said, as a majority were known from the start to be incurably affected

with tunnel on the brain. I simply give in the Appendix the yeas and nays upon one test vote for convenience of reference by their constituents.

#### SUPPLEMENTAL ACT.

This, (chapter 350,) like a lady's postscript, contains the most important part of the tunnel legislation. Here is the entire Act :—

#### [CHAP. 350.]

AN ACT supplemental to an Act in further addition to an Act providing for the more speedy completion of the Troy and Greenfield Railroad and Hoosac Tunnel.

*Be it enacted, &c., as follows:*

SECT. 1. The Hoosac tunnel shall be constructed with a width sufficient to permit the construction and use of two railway tracks through the same, and a single track shall be properly laid and ready for use through the tunnel, and the contract under the act to which this is supplementary shall include the construction of the same.

SECT. 2. The governor and council are hereby authorized to appoint such engineers and superintendents of the work on the Hoosac tunnel as they shall deem expedient and necessary, and fix their compensation.

SECT. 3. The sum of two hundred and fifty thousand dollars may be expended prior to October first in meeting expenses under contracts already made, and paying off existing liabilities and prosecuting the work on the tunnel, which sum shall be taken from the appropriation heretofore made for the tunnel, and shall constitute a part of the five millions of dollars authorized in the act to which this act is supplementary.

SECT. 4. The contract shall provide for payments by instalments as the work progresses, in such manner, that not less than twenty per centum of each amount due shall be reserved for a final payment on the completion of the same.

SECT. 5. No more than one million dollars shall be appropriated and paid out of the treasury the present year under this act or the act to which this is supplementary.

SECT. 6. This act shall take effect upon its passage. [*Approved June 11, 1868.*]

Section one requires only a single track to be laid out of the five millions. When a double track becomes necessary, as it will be for a great commercial road, at least another million will be required for widening, rails, &c., &c.



Section two and the section struck out by the Senate, authorizing the making of one *or more* contracts, contained all that made the introduction of the supplemental bill necessary. It will be remembered that the original bill abolishes the board of commissioners after the contract shall have been made, and provides for placing the whole work in charge of a superintending engineer. This was all that efficiency and economy required or would allow—one competent superintendent, with authority to appoint all his assistants and subordinates, and under the fullest responsibility for the entire management, subject to the approval of the governor and council. This system not only secured economy, efficiency and responsibility, but, more than all, it removed the whole enterprise from the domain of politics, so far, at least, as is possible while the State is connected with the work. But this is not what the Ring wants. Hence the authority given to the governor and council “to appoint such engineers and superintendents as they shall deem expedient and necessary.” This opens the door to the whole horde of plunderers who have swarmed around this enterprise, provides for retaining Colonel Crocker, Mr. Alfred R. Field, and any number of their lackeys, and involves the perpetuation of the irresponsible, intermeddling and shifting policy which curses all public works, and has particularly disgraced this. There is a huge cat under this harmless looking pile of meal.

Section three is an admission that \$250,000, in addition to \$250,000 appropriated in the original bill, and the unexpended balance of previous appropriations, \$600,000 to \$800,000 in all, will be expended before October 1st.

Section four is useless, except as an *ad captandum* repetition of the deceptive pretence of security for the fulfilment of the contract.

#### SEPARATE CONTRACTS PROHIBITED.

The bill originally reported in the House contained the following section :—

“The work of constructing said tunnel may be let in one or more contracts, provided that the amount to be paid for constructing all of said sections shall not exceed five millions of dollars.”

Mr. Morton of Boston moved to amend by striking out this section. This motion was resisted by the tunnelites with an earnestness which showed that they regarded this, as well as the section authorizing the governor and council to appoint additional superintendents and engineers, as an essential part of the bill. The opposition to this section was put upon the ground that it opened the door wide to evasions and fraud, and especially that its adoption would endanger what the majority of the House was determined to secure, and that was that the contract should secure the completion of the tunnel for five millions. After full debate, the motion was carried by a vote of 103 to 96.

In the Senate, the obnoxious section was restored; and upon its return to the House, the amendment was non-concurred in by a vote of 102 to 90. The Senate insisted; the bill went to a committee of conference, and that committee reported that the Senate recede from this amendment, and that the House recede from other unimportant amendments; and thus this insidious trick was defeated. Will it be believed that, in the face of these facts; in the face of the fact that the original bill authorizes *a* contract to be made, uniformly using the singular number when referring to said contract; in the face of the fact that the House deliberately refused to authorize the making of more than one contract,—with the full knowledge of these facts,—the commissioners, in their advertisement, invite proposals, “either in three separate contracts for three different sections of the work, or in one contract for the whole;” and their “specifications” are so drawn that the work may be divided into three contracts, and, for aught that appears, into an indefinite number of contracts? Yet such is the fact, and the fraud is in a line with the unbroken practice from the commencement of the tunnel. Always its friends have engineered their claims through the legislature under false pretences; and always they have construed or tortured each Act to authorize just what the legislature never intended to authorize.

This, however, is the most bare-faced perversion of both the letter and spirit of legislation that has yet been attempted, and for the obvious reason that they were in a desperate extremity. *They* knew perfectly well that the tunnel could never be completed for five millions; *they* knew perfectly well, that no

contract, with "satisfactory guarantees," could be made for completing it for that sum; and hence the Ring was desperately bent upon obtaining from the legislature authority to make separate contracts. Defeated in that, and knowing that the phraseology of the Acts, illustrated by the action of the House in denying this power, could not by any honest rule of interpretation be construed into authorizing the division of the work, they contemptuously set aside the clear requirements of the law, and cut the knot which they could not untie.

To understand clearly the nature and extent of this attempted fraud upon the intentions of the legislature, let us inquire carefully, first, what the legislature authorizes these commissioners to do; second, what they propose to do.

1ST. WHAT AUTHORITY DID THE LEGISLATURE GIVE TO THESE COMMISSIONERS IN REGARD TO MAKING A CONTRACT?

Section first of the original bill first mentions the contract in the following proviso:—

"And *provided further*, that after the first day of October next, no part of this appropriation shall be used in payment for work done in excavating the tunnel, unless the same be done under contracts approved by the governor and council; and they are hereby authorized to contract for the whole work of constructing the Hoosac Tunnel: *provided*, that a contract, with satisfactory guarantees, can be made for the completion of the same within a period of seven years, and at a cost not exceeding five millions of dollars; and *further provided*, that in case a contract should be made by the governor and council for the completion of the tunnel, there shall be withheld from payment under said contract a sum not less than one million dollars until the final completion of said work and the acceptance of the same by the governor and council."

The first clause refers to "contracts,"—the only use of the plural word in either bill. This clause is a dead letter, for, after the \$600,000 appropriation had been struck out, there was no appropriation to which it could apply, the only two appropriations being restricted, one to the railroad, and the other to interest. The clause cannot be tortured to apply to the five million appropriation, for that had not yet been referred to; and no legitimate rule of construction will allow it to apply to an appropriation subsequently made and for a purpose not



yet declared. Before Mr. Dana's amendment was adopted, it had a meaning ; afterwards, none.

The only possible construction which will give this clause any meaning is that it was meant to prevent interference with "existing contracts" with Mr. Farren, as stated by the commissioners in their "specifications," and is intended to cover his contracts and *a* contract as subsequently described ; "provided that a contract, &c.," "and *further provided*, that in case *a* contract should be made, &c."

Section second authorizes the governor and council to contract with any person or corporation for the completion or purchase of the tunnel ; but this has nothing to do with the contract for which the five millions was appropriated.

Section third : "When *a* contract is made as provided in the first section," &c., using the same word in the singular, and excluding the application of this word to any contract or contracts which the governor and council might make under section two.

The phraseology of the supplemental Act confirms this position. Section one refers to "the contract (singular) under the Act to which this is supplementary, &c." Section four says : "The contract shall provide, &c."

Now, add to this the fact that the House struck out the section authorizing the work to be "let in one or more contracts," adhering to its purpose plainly declared in the original bill, and persistently refusing to modify that purpose ; and I ask, who could have dreamed that the commissioners would have dared to propose to let out this work under three or more contracts ?

## 2D. WHAT DO THE COMMISSIONERS PROPOSE ?

In their advertisement, "the commissioners, &c., invite proposals, &c., for completing said tunnel, either in separate contracts for three different sections of the work, or in one contract for the whole."

### *The Specifications.*

The work is divided into three sections : I. *East End of the Tunnel* ; II. *Central Shaft* ; III. *West Shaft and West End Workings*. The work under each section is divided in six different subdivisions, each of which, for aught that appears, may be let out under a separate contract.

Now there is nothing in the "specifications" that enables us to decide whether the commissioners intend to make a contract for each of the three sections, or for each of the eighteen subdivisions. Nor is it material. The letting out of the work under more than one contract equally violates the law, whether by three contracts or eighteen, and equally opens the door to fraud.

I might criticize the specifications in detail, and drive a coach and four through the loop-holes. One general remark may be made, and that is, that *the State takes all the risk of extraordinary contingencies*. For instance, suppose, as has been predicted by competent experts, the increase of water or a change of material as the tunnel enters the mountain should make arching necessary. This would increase the cost very largely. The contractors do not agree to do this, and the extra cost falls on the State.

Again, the arching at the West End is to be done by the M. Suppose the contract requires the arch to be three feet thick, and afterwards it is found necessary to build it four feet thick. The contractor cannot be held to make the additional excavation required for the enlargement, or to lay the extra brick, and he calls upon the State for allowances on his own terms or throws up the contract. This contingency could have been avoided if the specifications had required proposals for arching *per lineal yard*. Mr. Farren's contract is at so much per lineal yard, and the State is secure unless the contractor fails, and then she has so much work done for her money. But with a contract for arching per M, the contractor can stop whenever he pleases, and at worst he only forfeits twenty per cent. on the contract price of so many M of bricks laid, not twenty per cent. on the whole contract.

But it seems idle to criticize trifling details in a work of this magnitude—childish to quiddle over the spigot when the bung is open. The truth is, the issue of a contract depends entirely upon the competency and *honesty* of the parties who make it; and when the party of the first part, whose special duty it is to protect the interests of the State, begins by violating a law of the State, it is a hopeless task to interpose obstacles between them and the treasury of the Commonwealth, which they mean to rob. Between the contractors, whose interest it is to get the

largest amount of money for the smallest amount of work, and the commissioners, whose determination it is to put the tunnel through at whatever cost, may God save the Commonwealth of Massachusetts.

What led the commissioners to attempt this gross violation of law? The pretence is that they could get no bid for the whole work. What if they could not? Then their occupation was gone—that is all—and they knew it; but that was no affair of theirs, as agents of the legislature, restricted in their functions to limits set by the legislature. The legislature had said, as plainly as language could say, “If you can make a contract for completing the tunnel within seven years, for \$4,750,000, and with ‘satisfactory guarantees,’ make it; if not, let it alone. Our successors next winter will see what is to be done.”

It is pretended that they can get the work done for less money under several contracts than under one. The sufficient answer is, that the legislature decided that the work should be done in this way or not at all. Upon what meat do these three men feed, that they have grown so great as to nullify a plain Act of the legislature? No; all these pretexts are shams. The real purpose of this audacious fraud is, to *secure the application of the whole of the appropriation to a part of the work, and throw upon the State the burden of completing it.*

#### *The Effect of Separate Contracts.*

The legislature intended to secure this: that, if a contract were made, it should be for the completion of the tunnel in seven years, for a specified sum. This proposition was made by the friends of the tunnel, and the legislature took them at their word, “Now show your faith by your works.” If a contractor appeared, ready to make a contract upon these terms, with “satisfactory guarantees,” and a contract should be made on this basis and honestly enforced, the work was secured. Everybody knew—and nobody was more fully convinced of this than the men who made the proposition—that no such contract could be made. Events have proved this. The advertisement for proposals was made public on the 26th of June. It came to be fully understood that no proposals would be made, and about August 1st the time was extended to September. (*No public notice has been given of this extension.*) The knowledge of this



extension was to be confined to the Ring.) Perfectly convinced that no contract could be made in accordance with the intentions of the legislature, the managers were forced to evasion. Hence the plan of separate contracts.

Among the methods of evasion, this is an obvious one. Suppose three contracts are made; two of them can be made on terms which will give the contractors large profits—upon such terms that they will make money if they receive eighty per cent. of the contract price, so that they will be safe if they stop at any time. These two contracts may be so made that they will absorb three-fourths of the appropriation for one-half or one-fourth of the work. The third contract may be made, agreeing to do the balance of the work for the balance of the appropriation. Nominally, there may appear to be separate contractors; really, there will be but one interest. The work is commenced, the three contracts being prosecuted simultaneously. So long as the profits on the first two exceed the loss on the third, all is well. So soon as this ceases to be the case, the third contract stops. It will be entirely easy for men who have acquired such skill as these parties, in years of similar trickery, so to arrange prices and work under the different contracts as to secure the expenditure of nearly the whole of the appropriation, and yet leave the heaviest part of the work to be done. The State must then finish or lose all. This always has been and is still the purpose of the ring—to get the State in so far that she will be compelled to go through.

But “satisfactory guarantees” are to be required! It is superfluous to argue that the idea of guarantees which would be “satisfactory,” in the sense in which the word is understood in private transactions, is a transparent delusion. No contractor can or will be found who will give any other security than that which is given by the twenty per cent. reservation, and this is no security at all; for no contractor can or will be found who will not make his prices such that eighty per cent. will give him a profit, and when he finds that that expectation fails, he will stop and the State will have no remedy.

But even this apparent security under the twenty per cent. reservation fails entirely under the plan of separate contracts. The intention of the legislature clearly was, that twenty per cent. of the whole appropriation should be reserved *until the*

*completion of the tunnel.* The separate contract system excludes the possibility of even this security. The specifications under the head of "manner and provisions of payment," stipulate: "Payments shall be made each month \* \* \* on account of work done during preceding month, \* \* \* making a deduction of a reserve of twenty per cent., to be retained until the completion of this contract, &c., &c."

"And on completion of the contract and final estimate by the engineer, the reserve of twenty per cent. *will be paid, &c., &c.*"

Now "this contract" means this separate contract, not the various contracts for completing the work, as no contractor would agree to wait for his pay until other contractors had finished their work; and the words, the "completion of the contract and final estimate by the engineer," for the same reason, apply to the completion of this separate contract. Thus, the contractor under two of the contracts supposed, is entitled to a hundred cents on the dollar.

Indeed, under the construction forced upon the law by the commissioners, the work may as well be divided into an indefinite number of contracts—there is nothing in the specifications limiting the number—and the contracts may be so arranged as to close every three months, or every month, and each separate contractor may draw his entire pay every three months or every month.

There is no end to the loop-holes which may be found under this separate contract plan. I will not weary my readers by detailing them. The ingenuity which devised the fraudulent plan will not fail to discover methods for securing the only result aimed at—the tunnel, at whatever cost.

But, it will be said, this argument assumes incompetency or dishonesty on the part of those who are to pass upon the question of "satisfactory guarantees." It assumes what we all know, that the State has been gradually drawn into its present relations to this work by just such trickery as this—less audacious, less outrageous, I admit. From the start, constructions which the legislature never dreamed of, have been forced upon laws. Promises have been made which were never intended to be kept; the most flattering prospects portrayed, only to be successively blighted. A compact, unscrupulous,

selfish Ring has dominated political conventions and legislative canvasses. A profligate lobby has disgraced the fair fame of Massachusetts legislation. The timid have been frightened; the mercenary have been bought; the weak have been humbugged; the confiding have been cheated. I assume—at least I fear—that what has been will be; especially is suspicion justified when the first act of these commissioners is such a bare-faced repudiation of the deliberate adjudication of the legislature.

Suppose, when the House was discussing the proposition to authorize separate contracts, a tunnelite had declared,—“It is immaterial how the House decides this question. We shall construe the Acts to give the commissioners authority to divide the work into as many contracts as they please.” Can any man doubt how such a declaration would have been received? Was there a fair-minded man in the House who would not have scouted the suggestion, and added: then, if it is possible to make our meaning clearer, let us do it?

After the foregoing pages were in print, a letter from Mr. R. H. Dana, Jr., appeared in the “Springfield Republican.” After referring to the passage of the original Act, requiring one contract, Mr. Dana says:—

“The friends of the tunnel were uneasy about the requirement of a single contract, and the reservation of the one million to the end. A supplemental bill was brought into the House by Mr. Towne, of Fitchburg, which contained a section permitting the completion of the road by several contracts, not exceeding six, and, in that case, instead of the reservation of one million to be paid on the completion of the whole, it provided for a reservation of twenty per cent. on each contract. On this provision of Mr. Towne’s bill there was a well understood and earnest debate. In its favor, it was contended that it was for the interest of the State to be able to make several contracts, by sections; and, as the cost was to be \$5,000,000, whether there was one contract or several, a reservation of twenty per cent. on each contract would amount to one million. To this it was answered, among other things, that, as each contractor would be entitled to his reserved twenty per cent., when his own contract was completed, and no contractor would agree to have his full payment depend on the work of other contractors, the advantage of a large reservation to secure the final completion



would be lost ; and that the only safe course was to have this large reservation to the very end, and to provide for a single contract to which this reservation should be attached. The latter view prevailed, and Mr. Towne's proposal was struck out by a vote of 103 to 96.

"The supplemental bill then went to the Senate, where Mr. Brooks, of Franklin, moved to insert Mr. Towne's section as an amendment. In the Senate the two systems were fully discussed—that of one contract, with \$1,000,000 reserved, and that of several contracts, with twenty per cent. reserved on each. The latter prevailed, and the supplemental bill was sent to the House with Mr. Towne's section in it as an amendment. In the House, Mr. Morton moved to non-concur in this amendment. The subject was again fully discussed, and the House refused to concur, by a vote of 102 to 90. The Senate adhered to its amendment. A committee of conference was appointed. This committee reported that the Senate give way on Mr. Towne's section, and that the House agree to another amendment of the Senate, increasing an appropriation under section three of chapter three hundred and fifty, for expenditures prior to October 1, from \$150,000 to \$250,000. This report was accepted by both branches. The result of the whole was, that small specific appropriations were made for the payment of interest, and for the carrying on of certain work during the summer and autumn, until the contract for completing the work could be made, and that the contract for the completion of the work was to be a single contract, for not more than five millions, in not more than seven years, one million to be reserved until the satisfactory completion of the entire work of tunnel and road.

"Of the correctness of the above statement, I am sure no one will suggest a doubt. In the whole session there was nothing more thoroughly understood, more frequently debated and voted upon, than the two systems, of one contract with one reservation, and several contracts with several reservations, besides being the subject of a difference between the two houses, which was settled by the report of a conference committee adopted by both branches."

Hon. George Walker adds the following :—

"After reading the above letter of Mr. Dana, I desire to explain that I left Boston to meet an important engagement in New York, on the afternoon of the 8th of June, having waited only till the original bill had passed through all its stages, and did not return before the final adjournment on the 12th. The facts stated by Mr. Dana are therefore new to me ; but they confirm in the fullest manner my own opinion, formed during the discussion of the original bill, that the House never did con-

sent, and could not by any sophistry be persuaded to consent, that the single contract which it had authorized should be split up into several individual undertakings."

I have seen several leading members of the legislature, and without exception, every one confirms the above statements.

But, it will be said, the contract or contracts must be made by the governor and council, not by the commissioners; and can it be supposed that they will sanction this perversion of the law contemplated by the commissioners? I cannot believe it possible. In his private capacity not one of those gentlemen would be capable of such an outrage; but I know too well how easily individual responsibility is shuffled off in that body. I have been behind those scenes. I have seen an order of council passed providing for the payment of over \$70,000, to one of Haupt & Co.'s creditors, *every dollar of which the State had once paid*; and this, too, when Governor Andrew entertained the undoubting opinion that not a dollar of the amount ought to be paid by the State, and when he had the absolute power to prevent the passage of the order; and yet it was paid, under the pressure of appliances and influences which always have been and still are brought to bear upon the decision of all questions relating to the tunnel.

"Sin has a thousand treacherous arts  
To practice on the mind;  
With flattering lips she tempts the heart,  
But leaves a sting behind."

It is rumored that the attorney-general has given an opinion that the Act allows separate contracts to be made. This seems hardly credible; still less does it seem possible that the governor and council will shield themselves behind such an opinion. The attorney-general was born and brought up and practised law for years in Greenfield—in a community where tunnel-on-the-brain has long been a chronic disease, and where professional success and personal comfort depended upon orthodoxy on this matter; and without questioning his honesty, it is simply impossible that a young man should be free from the bias of these surroundings and influences. It would be a gross insult to the intelligence and manliness of the ten gentlemen who compose the executive department of the government to insinu-

ate that the opinion of an officer with such antecedents, saying nothing of his age and position in the legal profession, could so control the judgments of the governor and council, as to lead them to violate the manifest intentions of the legislature, and this in the face of the grave prohibition in the Bill of Rights, that the executive department "shall never exercise the legislative powers."

But, "the question would be carried to the supreme court under an application for an injunction." Yes, with an attorney-general, if the rumor be true, to argue the case, who has already given an opinion in favor of the obnoxious construction!

I do not question that the governor and council will be governed by their own honest convictions of public duty and the public interests; but I remember that these commissioners were appointed by the governor and council, and it is not agreeable, to say the least, to repudiate the acts of their own agents. If this board were like that appointed by the governor and council last year upon the Hartford and Erie Railroad matter, we might feel less distrust as to their acts. The legislature authorized the loan of the scrip of the State for three millions upon certain conditions, and provided for the appointment of three commissioners whose duty it should be to see that those conditions were complied with, and thus the State should have all the "satisfactory guarantees" that were possible. The governor and council appointed GEORGE TYLER BIGELOW, EMORY WASHBURN and SAMUEL ASHBURNER; the first ex-chief justice of the supreme court of Massachusetts; the second, ex-governor and professor of law in Harvard College; the third, a civil engineer of large experience and the highest attainments and of rare personal independence. No three gentlemen could have been found in the State, of greater, I might safely say of equal, fitness, for capacity and character, without prejudice, without bias, without fear or favor, to do justice to the corporation, to carry out the intentions of the legislature and especially to guard the interests of the State. Precisely similar duties are imposed on the tunnel commissioners, with this difference: that the amounts involved are very much larger. Who are set to guard the interests of the State in connection with this work? *Alvah Crocker, Tappan Wentworth, Samuel W. Bowerman.* I do not impugn their personal integrity. It is



enough to say that every one of them is profoundly impressed with the conviction that his whole duty is *to put the tunnel through at whatever cost to the State. Quis custodiet custodes?*

Our suspicions of the intentions of the commissioners are justified by the

#### LOOP-HOLES IN THE SPECIFICATIONS,

through which an unskilful legal Jehu could drive a coach and four. I will specify only one or two.

No requirements are made as to *rate of progress* through the "demoralized rock,"—that is, that portion between the east end of Farren's contract and the west shaft. This part of the work is referred to under the heading of "work to be done" in this section, viz.: driving the heading and enlargement of the same between these points; but in fixing the rate of progress in this section as they have done in the other two, no mention is made of progress required between these points. The only requirement is—"The contractor shall employ suitable force, and shall maintain, after December 1, 1869, an average rate eastward of monthly progress of tunnel excavated to full size, of not less than 100 feet." Now, progress "eastward" here evidently means eastward from east heading of west shaft working. It is impossible that the arching can be completed by December 1, 1869, for these reasons: Farren's contract requires him to reach a point 931 feet east from west end, on or before June 1, 1869. Of course, the work of tunneling and arching cannot be continued until he reaches that point. Between the terminus of his contract and the heading from the west shaft westward, there are about 300 feet of heading to be excavated, and the whole distance from Farren's contract to west shaft is to be arched—about 1,300 feet.

Now, the specification states that in June last Farren had 231 feet of his contract to do, and they allow till June 1, 1869, for doing it. This is at an average monthly rate of  $19\frac{1}{4}$  feet. Perfectly clearly, then, the requirement of 100 feet monthly progress cannot apply to this part of the work. Then, of course, this work is not included in the specifications. Nobody knows what rate of progress will be required. The matter will be left to *private* negotiations with favored bidders. Honest parties who make proposals are under the disadvantage of not

knowing to what extent bids may be sweetened by subsequent negotiations covering this work.

There is also either a singular blunder or an intentional fraud in the requirements of the specifications, as to the

*Time of completing the Tunnel.*

The Act requires that the tunnel shall be completed in seven years. Considering the fact, that at the rate of progress last year under Colonel Crocker, which was the best progress ever made, and the best Colonel Crocker could make, with unlimited means and no unusual interruptions, it would require eighteen to nineteen years to complete the tunnel. It cannot be supposed that the legislature allowed longer time than was necessary. Seven years was declared by the friends of the tunnel necessary, and seven years were allowed. The specifications require it to be completed in less than four years from October 1, 1868!

Under the first division—east end of tunnel—the requirements are as follows:

“The contractor shall \* \* \* maintain average rates of advance on each of the several sections, described as follows:

- |  |                    |
|--|--------------------|
| 1st. On the tunnel enlargement, . . .    | 75 feet per month. |
| 2d. On the heading enlargement, . . .    | 75 “ “ “           |
| 3d. Extension of full size tunnel, . . . | 125 “ “ “          |

“The work of each separate section described shall be commenced at west end of work completed by the State, and thence carried with a complete advance westward, reserving always to the contractor the privilege of working two or more breasts on each one of the sections described, in order to make up the aggregate rate of progress required in each.” This language admits of but one meaning; and that is, that the monthly progress of completed tunnel, commencing from the end of the present heading, must be 125 feet from and after October 1, and that the heading enlargement and tunnel enlargement must proceed simultaneously at the specified rates.

At the central shaft division, the shaft is to be sunk to grade on or before December 1, 1869, and thenceforth there is required “an average rate of progress of tunnel excavated to

full size, east and west, of not less than 80 feet in each direction. At the west shaft division, the contractor shall maintain, after December 1, 1869, an average rate eastward of monthly progress, of tunnel excavated to full size, of not less than 100 feet." Let us see how beautifully these requirements will bore the Hoosac Mountain. Puck's girdle round the world was child's play.

The work done—that is, linear progress of headings, adits, and gimlet holes—is stated by the commissioners as follows:

East end, . . . . .	5,150 feet.
West end, east, . . . . .	1,476 "
"    "    west, . . . . .	1,037 "
Farren's contract, . . . . .	931 "
Between west shaft and Farren's contract, . . . . .	1,300 "
<hr/>	
Wholly or partially done, . . . . .	9,894 feet.

Subtracting this from the whole length of the tunnel, 24,862 feet, and there remains 14,968 feet of new tunnel to be excavated. Suppose the contract or contracts made, the work commences at the east end October 1, 1868, and advances at the rate of 125 feet per month till December 1, 1869,—1,750 feet. Deducting this amount from work to be done October 1, 1868, (14,968—1,750) and there will be 12,218 feet to be excavated after that date. The central shaft will then have reached grade, and tunnelling will commence on two faces. At the west shaft, the contractor then commences tunnelling, (why the work here does not commence at the same time as at east end we are at a loss to conjecture.) The monthly progress will then be 125 feet at east end; 160 feet (80 feet at each face) at central shaft; and 100 feet at west end. That is an aggregate monthly progress of 385 feet. 12,218 linear feet to be excavated, at the rate of 385 feet per month. Here is the equation:  $12,218 \div 385 = 31$  months and 21 days.

That is, the tunnel is to be completed in two years seven months and twenty-one days from December 1, 1869, or three years nine months and twenty-one days from October 1, 1868! How stupid in the legislature to allow seven years, involving such an enormous loss of interest, when it can be done in half the time.



Now it will not be pretended that the requiring of these rates of progress was done for economy; for everybody knows that a contract can be made on better terms, both for the contractor and the State, if reasonable time is allowed, than if such simply unattainable rates are required. Either the commissioners blundered,—and they will hardly claim that they neglected to apply the simplest rules of arithmetic to the problem,—or these absurd requirements were put forward for an ulterior purpose; for subsequent “truck and dicker.” Is this uncharitable? Then what does it mean?

Legal gentlemen, in looking for the evidence of an alleged crime, first search for the motive. What motive drove these commissioners to this disreputable perversion of clear provisions of law? It must have been dire necessity. They knew that no honest contract could be made for completing the tunnel in accordance with the requirements of the law; and, as their paramount duty is to put the tunnel through, no alternative was left but to violate the law.

*Is an honest Contract possible*

for completing the tunnel, as required by the legislature?

From the \$5,000,000 appropriated, \$250,000 may be expended prior to October 1, 1868, leaving \$4,750,000 for the completion of the tunnel under the contract. Let us examine the available means at the disposal of the commissioners.

That portion of the work between the west shaft and Farren's contract is to be treated exceptionally. Its cost is so excessive that it will not be fair to estimate it by the cubic yard at the same rates as ordinary excavation.

The only proper basis is the cost of that work under Farren's contract. The commissioners state that 231 feet of this contract remained to be done June 26, which he was to do in eleven months. He would do three-elevenths of this before October 1, or 63 feet, leaving 168 feet to be done after that date. There are about 300 feet between the terminus of his contract and the west heading of working from west shaft. There will be then 468 feet to be excavated and arched before reaching the heading. Farren's price is something over \$400 per linear foot. At \$400, these 468 feet will cost \$187,200. From the west shaft westward to this solid tunnel, there are

1,037 feet, through which a small adit or heading has been driven. This is to be enlarged to full sized tunnel and arched. Deducting from Farren's contract price \$50, on account of this heading, the enlargement and heading of this 1,037 feet will stand at \$350 per linear foot. This will amount to \$362,950. These two sums, amounting to \$550,150, will make the cost of completing the tunnel to the west shaft. Deducting this amount from \$4,750,000, we have, in round numbers, \$4,200,000 for completing the rest of the tunnel.

The cost of pipes and laying the same for the central drain, and for power, ventilating, &c., &c., (the excavation for central drain will be estimated under another head,) must also be deducted.

I infer from the specifications that 4,050 feet of the central drain are completed at east end. The whole length of the tunnel being 24,862 feet, pipes must be provided and laid for the balance—(24,862—4,050,) 20,812 feet. Fifteen dollars per foot would be a very low figure for the cost of pipes and laying, as the pipes for compressed air, especially, are very expensive. This would make the cost under this item \$312,180—say \$300,000. Deducting this amount from \$4,200,000, we have remaining \$3,900,000.

Still another deduction is to be made, under the following requirement of the specifications:—

"The Commonwealth shall permit the use by the contractor, without charge, for the purposes of the work herein specified, of the dam and canal, water wheels, saw mill, machine shop, with its shafting, lathes, drills, benches and fixtures, compressors, and other machinery for power and ventilation, now set up and in use, with the buildings connected therewith, together with the pneumatic drills, air and water pipes, cross-ties, cars and drill carriages, which are now in use for the prosecution of the work; stipulating that he shall keep all the same, at all times, in a complete state of repair and efficiency."

Now, the cost to the State of these items, to January 1, 1868, as given in the commissioners' last report, has been—

Dam, wheelpits, &c., &c., . . . . .	\$247,000 00
Buildings, . . . . .	96,000 00
Machinery, . . . . .	340,000 00
Total, . . . . .	<hr/> \$683,000 00

The contractor is to pay nothing for the use of this property, only to keep it "in a complete state of repair and efficiency." (I hardly think Colonel Crocker would let his paper mills on such terms.) The repairs on the dam, canal and permanent works ought to be very light. Deduct say \$183,000 on that account, and there remains \$500,000 worth of buildings, machinery, &c., subject to serious wear and tear. Ten per cent. per annum would be a low price for keeping buildings and machinery of this description, and doing such work, "in a complete state of repair and efficiency." This would amount to \$50,000 annually, and for seven years to \$350,000. This sum deducted from \$3,900,000 leaves \$3,550,000.

It is true that these last two items are not to be deducted from the amount of the appropriation *before* it is paid to the contractor; but the cost under these items is to be borne by the contractor, and goes, to the extent of that cost, to reduce the amount he will receive under the contract for excavation.

There is still another heavy item to be deducted, and that is the cost (as required in the specifications,) of "laying one track complete, including the furnishing iron rails, chairs, spikes and cross-ties," through the whole length of the tunnel and to North Adams. The cost will be, at low figures, \$18,000 per mile—say \$120,000. Deducting this from \$3,550,000 leaves \$3,430,000.

But the central shaft is also to be treated exceptionally. Dull & Co.'s contract price was \$25 per cubic yard for work on central shaft—nearly three times their price for ordinary excavation—and they broke down at that. But we will figure it at that price.

The shaft is to be sunk 447 feet, at  $11\frac{3}{4}$  cubic yard per foot of depth; the excavation here will amount to 5,250 cubic yards. At \$25 per cubic yard, this will cost \$131,250. Deducting this from \$3,430,000 leaves, in round numbers, \$3,300,000.

Still another deduction is to be made for excavating "Haupt's tunnel," referred to in the foot note on page 5. This is about 500 feet long, and must be enlarged and arched or made an open cut. The difference in the cost of the two methods would not be material. Estimating it one-fourth the cost of similar work under Farren's contract, (it would undoubtedly cost at least half as much,) that is \$100 per



linear foot, this will cost \$50,000. Deducting this from \$3,300,000, we have \$3,250,000 as the available means for excavating the entire tunnel, except the portion for which estimates have been made. How much work is to be done with this money?

*Amount of Excavation under the Contract.*

The specifications state the total amount of excavations from east end to central shaft, (not including central drain,) and the amount of excavation for the enlargement from west shaft to the end of the heading. To these are to be added the excavation for entire tunnel from central shaft to west end heading. The distance is 10,318 feet, all new tunnel. The commissioners say that the excavation of 5,300 linear feet of tunnel amounts to 86,000 cubic yards. This gives  $16\frac{2}{5}$  cubic yards per linear foot. Either they have made a mistake or they have reduced the size of tunnel from that heretofore adopted. However, I will take their figures. The excavation of 10,318 feet would amount to 86,920 cubic yards. The specifications make no statement of size of central drain. It must be at least two feet by four. The length will be (as before figured,) 20,812 feet. Here is the equation:  $20,812 \times 2 \times 4 \div 27 = 6,166$  cubic yards of excavation for central drain. We have then amount of excavation as follows:—

Tunnel enlargement, east end, . . .	5,100	cubic yards.
Heading “ “ . . .	27,400	“
New tunnel to central shaft, east end, . . .	86,900	“
West end enlargement, eastward, . . .	16,000	“
New tunnel from west heading to central shaft, . . . . .	169,215	“
Central drain, . . . . .	6,166	“

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Total excavation for tunnel from east end to west shaft, including central drain, . . . . . 310,781 cubic yards.

This will give the contractor ten dollars and forty-five cents per cubic yard.

If anybody believes any honest contract can be made with satisfactory guarantees for doing this work for this money, he

can only come to that conclusion by shutting his eyes to all the experience of the past and literally going it blind. Let us look at a few facts.

The State has excavated up to Jan. 1, 1868, (see page 9,) 42,936 cubic yards, at a cost, without interest, (see page 22,) of \$2,459,044, averaging \$57.27 per cubic yard. This includes whole cost of buildings, dam and machinery, which would make the cost greater at the commencement than at any subsequent period. At the central shaft, 6,900 cubic yards have been excavated at a cost of \$262,768, averaging \$38.37 per cubic yard. Here the cost of buildings and machinery has been comparatively small.

If it be objected that the cost of the whole work does not give a fair basis, let us take last year's work, which was conducted by Col. Crocker with all the energy and economy of which he is capable. The State excavated 18,473 cubic yard, at a cost, deducting amount paid Dull, Gowan & Co., of \$550,556, averaging \$29.70 per cubic yard. Including the work done by Dull, Gowan & Co., (which, remember, was done at a loss,) the whole amount of excavation was 25,808 cubic yards, at a cost of \$603,666, averaging \$23.38 per cubic yard. Mr. Latrobe says, in his last report, (Senate Doc., No. 20, pp. 50 and 51,) that it cost the State at the east end \$24.46 per cubic yard, and at the west end \$20.70 per cubic yard, "not including any part of the cost of the machinery and buildings connected there with nor of the expense of engineering and superintendence." The same remark applies to my calculation of cost last year, as the charges to machinery and buildings were only a little over \$80,000, hardly sufficient to pay ordinary wear and tear.

Now, if any man believes that a responsible contract can be made for doing this work at less than half what it cost the State last year, exclusive of cost of machinery and building, the contractor to furnish both, or, which in the end is the same thing, keep them in "complete repair," he must be under the influence of the charity which believeth all things.

I do not doubt that many persons have honestly entertained the opinion, that this work could be let out under contract much cheaper than it could be done by the State. This is by no means settled. Possibly the State might let out certain por-

tions of the work to be done by the cubic yard somewhat cheaper than she has done it, *she taking all risks of extraordinary contingencies*. But when it is proposed to make a contract for the entire work, the risks are so great, the contingencies so uncertain, that a responsible contractor *must provide a very wide margin*, and feeling the necessity of such margin, a prudent contractor would not agree to do the work for much less than it would cost the State.

I have as yet seen no evidence that the work was not done under Col. Crocker last year as economically as it could have been done by anybody. I know Col. Crocker well. I know his energy, his perseverance, his indomitable will, all inspired by intense enthusiasm for this enterprise. He knew that last year was to be a test year, and that if he could not go before the legislature with satisfactory results, he had but little hope of further appropriations. He devoted himself, body and soul, day and night, in season and out of season, to this, his darling work. He was opposed to letting out any of the work, (except the "demoralized rock,") by contract, because he firmly believed that he could carry on the work more efficiently and (giving him him credit as I do without reserve of meaning to serve the State faithfully,) more economically than anybody else. The contracts made against his opposition failed. He pushed the work with his utmost vigor, cutting off all extraordinary expenditures, reducing repairs of machinery to their *minimum*, for the purpose of showing the largest results for the smallest expenditure. There is the result—\$29.70 per cubic yard for his work, with but a fraction of the cost of machinery included in that!

What was to be done? He knew the legislature would not appropriate a dollar for continuing the work under the old system. He knew, too,—for a different opinion condemns his own management,—he knew that no contractor could do the work materially cheaper than he had done it, and that, if a contract was made, *in the end* the tunnel would cost the State as much as if he carried it on; but he knew there was no alternative, and, as a forlorn hope, he concluded to try, or rather to induce the State to try, the last dodge—a contract.

In considering the question whether a *bona fide* contract can be made with "satisfactory guarantees" to complete the tunnel for the appropriation, it must be borne in mind that the price



we have arrived at covers the entire margin for contingencies and profits.

Now, no prudent man would make a contract, which he meant to carry out, amounting to nearly five millions, without a margin of at least twenty per cent. I am assuming that everything is straightforward and above board—in as good faith on the part of the contractor to the State as we know it will be on the part of the State to the contractor; in a word, that nobody is to be cheated, that the contractor assumes all the risks, all the contingencies, and honestly intends and gives adequate security for fulfilling that intention (no bogus security of twenty per cent. reservation,) to deliver to the State, at the specified time,  $4\frac{3}{4}$  miles of completed tunnel and  $6\frac{3}{4}$  miles of road ready for use.

I repeat, no responsible contractor would think of making such a contract without a margin of at least a million dollars to cover risks and profits. Deducting this million from amount available for excavation and he would receive \$7.80 per cubic yard, leaving his margin for risks and profits.

#### *How was it brought about?*

How could the legislature be induced to sanction another dollar of expenditure for this worthless job? Nothing, even in the doings of last winter, can destroy my abiding faith that no legislature can be elected by such a constituency, a majority of whose members are not governed by honest convictions of what they believe to be the public interests. They may make mistakes, but they, the large majority, are not corrupt. In every legislature there is a class of members who form positive and intelligent opinions upon one side or the other of important public questions. Between the two divisions of this class there is always an uncertain force, consisting of persons who have no well-considered convictions upon many matters, some of whom are honest but pliable; some under the bias of personal or local prejudice or interest; a few, a very few, I believe, in a Massachusetts legislature consciously venal and corrupt. It is upon the weakness or wickedness of this middle class, the floating drift-wood, that log-rolling and lobbying are brought to bear.

Of the disturbing forces operating upon our legislature,

## LOG-ROLLING,

that is, combinations between parties for the exchange of votes and influence, has been the most mischievous. Fifteen years practice has made the tunnel Ring adepts in this disreputable trade. The tunnel vote proper in the House numbers only 30 or 40, less than one-sixth of the House. This would seem an utterly contemptible power; and yet, it will be remembered, that nearly all contested questions are decided by a smaller majority than this number. And by virtue of compactness, unscrupulousness, singleness of purpose, audacity and a readiness to sell their votes for or against any measure, without regard to its merits as a matter of public policy, this mercenary band wields a power vastly disproportioned to its numbers. I will not now enter into the details of their shameless bargains; it is notorious that upon every scheme of plunder, every measure of doubtful expediency, indeed upon every closely contested question, this pestilent element sold itself to the side with which it could make the best trade.

It is mainly as agents or brokers for negotiating these log-rolling arrangements that

## THE LOBBY

has exercised its baneful influence.

Of itself, the lobby is a harmless, nay, it may be a useful institution. The theory of legislation, it is true, is that all information shall reach the legislature through its committees, and every careful, conscientious legislator will receive with distrust all information which comes through any other channel. Such a legislator will be wise in receiving any facts which may be presented by persons whom he knows to be men of reliability and character, even though they may have a personal or local interest in the matter at issue. It is the professional, mercenary lobby that has become a public scandal in our legislation. This lobby had its origin in, and owes its perpetuation solely to, the tunnel. This gang, selling themselves to either party upon any question, (except that they never lobby against the tunnel;) prostituting personal and political influences to the wretched purpose of influencing legislation, without regard to public policy; hunting usually in couples, sometimes in full pack; without convictions, without compunctions, without malice

even,—these shameless shysters ply their disreputable trade in open day in Massachusetts halls of legislation, and hold nightly celebrations over their success in humbugging us simple-minded country people. If there be no other way of getting rid of these parasites upon the body politic,—worse than the frogs and flies of Egypt combined,—it would be better for the legislature to pay every guerilla of them a pension quadruple the amount of their ill-gotten gains. I do not believe that their influence is at all proportioned to their assurance and their pay ; it is the presence of such professional mercenaries that must stir the indignation of every high-minded man.

It is very humiliating to refer to such things as having existed and now existing in Massachusetts. Rather would we shut our eyes to facts which bring a blush of shame to the face of every right-minded citizen, and inflict upon the fair name and upon the honest legislation of the Commonwealth an injury which financial loss can hardly parallel. Rather would we

“Walk backward with averted face  
And hide our shame.”

But it is due to public morality to hold up their acts to universal scorn

“And put in every honest hand a whip,  
And lash the rascals naked from the State.”

Still, the *personel* of the lobby is so contemptible as to ability and character that undue influence is popularly attached to their operations. It is solely as brokers, procurers, pimps, that they are useful to their principals. Their haunt in Avon Place, furnished by their more guilty employers, with attractions for the weak, the unwary and the wicked, is simply an assignation-house, where voters in the market can be brought together and terms of exchange arranged. The keepers of such houses are not solely responsible for the vile deeds which there hide from the sun ; this must be divided with those who are only too willing to be debauched.

The *modus operandi* is this: As soon or even before the legislature meets, these brokers are on the ground, scanning the characters of members, forming the acquaintance of new members and flattering them with attentions, ascertaining what



“big things” will be up during the session, and using all available arts to magnify their own importance and influence. For those who cannot be enticed into their Avon Place haunt, suppers and excursions are arranged. By various appliances, aided by the ingenuity and experience of the Ring,—for, remember, that all these negotiations are in the interest of the tunnel, never against it,—the parties in interest are brought together and the brokers are ready for business. They hold in their hands so many votes for the Cape Cod Harbor, so many for Maverick Bridge, so many against the Horn Pond Railroad, so many against the Hyde Park petitioners,—that is, against the boundary line which they preferred,—so many in favor of increasing the pay of members.

So openly and so incessantly was this traffic driven during the last few days of the session, when the tunnel was pending, and its friends were pushed as they never were before, that one of the ablest and most high-minded members of the House remarked, “The atmosphere of the State House is thick with corruption; and were it not that I believe in the tunnel as a measure of public policy, I should feel it my duty to rebuke this profligacy by voting against the tunnel.”

No matter what the merits of a case were, it was decided solely by its relations to the tunnel. Take, for instance, the Horn Pond Railroad case. Mr. Addison Gage, one of our most public spirited, honorable and enterprising merchants, wanted to reach deep tide-water to enable him to compete with other ice-dealers for the foreign market. His only access to deep water is over the Fitchburg Railroad,—that corporation which, despising short traffic, opposed it,—and this was the only real opposition; and this influence, backed by the entire Ring, defeated this measure—than which, whether the public interests involved or the private character of the petitioners be considered, none better entitled to favorable action was ever presented to the legislature. But the leading friends of the measure in the House opposed the tunnel; and when, being assured by the leader of the Ring, that if they would withdraw opposition to the tunnel, they spurned the bribe, the bill was doomed.

Behind the lobby and greater than the lobby, inspiring, controlling, paying it, stand two powerful railroad corporations—the Fitchburg and the Vermont and Massachusetts, with their

array of officers and retainers, past, present and expectant. These creatures of the State, living and moving at the pleasure of the legislature, these corporations prostitute their great powers to the one purpose of swindling the people of the State out of millions for a job which benefits nobody but themselves. They know perfectly well that although the tunnel, if finished, will never bring new traffic to Massachusetts to warrant the expenditure of one-tenth of its cost, yet, dividing the traffic of existing lines, it will bring considerable traffic to their roads, and to the end of pushing the tunnel through, they apply all their energies with intense and unscrupulous selfishness.

Not content with superintending the nominations and elections along their entire lines, the officers of these corporations, impudently besieging the rooms of the President of the Senate, and the Speaker of the House, dictating the organization of the Tunnel and Railroad Committees, placing the Superintendent of one of their roads on the Railroad Committee, by the various appliances which bold bad men know too well how to use, including free passes, free excursions and free rum, exert an influence over legislation, unsuspected by those who never studied this phase of human depravity ; and these very men, thus shamelessly interfering with legislation for the sole purpose of putting the people's money in their own pockets, are all the time denouncing the Boston and Albany Railroad as opposing the tunnel. Ask the President of the Senate and the Speaker of the House, if any officer of the Boston and Albany Railroad, directly or indirectly, suggested the appointment of any member of any committee last winter ; and ask them, too, if the officers of the Vermont and Massachusetts and Fitchburg Railroads did not bore them beyond endurance (or rather one of them, for I suspect the other was "willing.") It is an old trick for the culprit to raise first, and shout loudest, the cry "stop-thief." The Boston and Albany Railroad Company is grasping and selfish ; these gentlemen are public-spirited and disinterested !

"True patriots they ; for be it understood,  
They *bleed* their country for their country's good."

But after all, giving their full weight, to these selfish and disreputable influences, unaided, they could not have carried the appropriation. There was a class of honest, independent

legislators, who would have opposed an original proposition to embark the State in such a work, but who yet voted for the appropriation and without whose votes and influence it could not have been carried. A part of these voted for it on the ground that the State is in it and must go through. As a business proposition, this is too absurd to deserve much discussion. The only question in considering the expediency of continuing an enterprise is—will it pay to send new dollars after old ones? If, all things considered, it will pay to finish the tunnel *from this time*, go on; if not stop.

But there was another portion of this class to whom the matter presented itself in this shape. They were satisfied it would be ruinous to proceed under the present system; but they were brought to believe that the management would be materially improved. Especially they were deluded with the idea, which was never thoroughly discussed, that the work could be much more economically done under the contract system. They were fully impressed with the importance of banishing this pestilent element from legislation and politics, and, their wish being father to the thought, they were too ready to welcome a proposition which promised to end the matter for all time. They said,—“The friends of the tunnel assure us, that they can finish the tunnel for five millions. We take them at their word. We will give them the five millions to get rid of them; but we will tie their hands so that they cannot spend the money without completing the work. We will require that the whole shall be done under one contract, will reserve one-fifth for security and will demand ‘satisfactory guarantees.’” Alas, they forgot that similar “satisfactory guarantees” were required that the two million loan should complete the work, and yet, that has gone and three or four millions more, and not one-sixth part of the work is done. They forgot that the enterprise is in the hands of men who will scruple at nothing to accomplish their selfish purposes, as abundantly appears from their swift contempt of the intentions of the legislature in providing for unlimited expenditure by proposing separate contracts.

How thoroughly these gentlemen were deceived, appears from the following statement. They were given to understand, and that was the expectation of every honest man in the legislature, that the appropriations made this year would complete



the railroad and tunnel, and thus at the end of seven years put the State in possession of a completed road, ready for the equipment. This expectation furnished the basis of their belief, that by voting for these appropriations they should deliver future legislation from this malign element. Chapter 333, applied \$250,000 *to the completion of the railroad*, and chapter 350 took \$250,000 more out of the five millions for work done before October 1st, on road and tunnel. I repeat, every honest man understood that the assurance was, and the conditions upon which the appropriations were made, was, that these two sums should complete the railroad and the \$4,750,000 should complete the tunnel. And yet, I have shown (page 5,) and I challenge refutation of the statement, that on the basis of an honest fulfilment of the contract, it will cost between seven and eight millions to complete the tunnel and *railroad*; and I have shown elsewhere, to the conviction of all fair minded men, that it will cost double that amount; and yet this year's action was to be final—no more appropriations; no more log-rolling—no more Avon Place debaucheries.

#### NOTHING IS SETTLED THAT IS NOT RIGHT.

No legislature can tie the hands of its successors. The question of continuing the work on the tunnel will be open for the action of the next legislature as fully as if the legislature had never met. Any contract made under authority of the last legislature can be set aside by the authority of the next legislature, subject to an equitable claim for damages on the part of the contractor; and no contractor can complain, for every respectable lawyer will tell him that he makes a contract with the Commonwealth, subject to this liability. Indeed, we presume no contract will be made which does not distinctly contain the right on the part of the Commonwealth to annul it at any time, on payment to the contractor of *actual expenditures*. If this right is not reserved, it will only add another to the proofs that in dealing with the tunnel the interests of the State are not as jealously protected as they are in this respect in all other contracts.

Especially, if to this undoubted right of the Commonwealth to close a contract whenever, in the judgment of the legislature, public policy requires it, there be added the consideration that

the contract is tainted with fraud throughout; that representations were made that the work could be completed for five millions, and that it will cost far more,—really more than double,—and the parties to the contract knew it; still further, when it appears that the legislature intended, and made that intention as clear as language honestly interpreted could make it, that the whole work should be done under one contract, and that this purpose of the legislature has been defeated, such a contract could not stand an hour before an intelligent and honest legislature, and no contractor would dare to present a claim for damages.

#### THE ULTIMATE TRIBUNAL.

I appeal to the tax-payers—in no penny wise and pound foolish policy, with no agrarian cry of the “rich against the poor,” with no disposition to withhold liberal expenditures for valuable results, even without pecuniary profits—but with an emphatic protest against this squandering of hard-earned money for worthless purposes. Remember that we have not yet begun to feel the burden of the taxation which the tunnel has involved and will involve. But a small fraction of past expenditures has been raised by taxation. The original two millions were borrowed, and a three million loan was authorized last winter to pay past expenditures. Another loan of five millions was authorized to pay for expenditures under the contract. Unknown millions are to follow, if the work is continued; all this must be paid by us or by our posterity. Pay day will come: it comes twice a year for the interest. The appropriation is easy; the raising of the money is easy; but it means more than this: sooner or later it means the inexorable tax collector, entering with equal foot the rich man’s palace and the poor man’s hovel. To the majority of our people it means self-denial; here, the loss of a coveted picture; there, the loss of a comfortable article of furniture; here, the invalid pines for a plate of fruit or a pleasant drive; there, books, amusements, the thousand little gratifications which become necessities to those who can afford them—all these went away in the tax collector’s pocket.

I know—and no man is prouder of it—how gladly this people pay taxes for all good purposes; but as I follow these appropriations, as they are distributed to every hamlet and every

household, and know that to large masses of people they involve self-denial and suffering, I cannot help denouncing the men who demand these appropriations, for selfish and sectional purposes alone, as oppressors and robbers of the people.

Over the head of a selfish Ring, over the heads of timid, trading politicians, over the heads of facile, not to say corrupt, legislators, I appeal to the people. I invoke the public press to enlighten the people. Let this matter go into every caucus and every convention for the nominations of candidates to both branches of legislature. Republicans of Massachusetts! You will elect an overwhelming majority of the next legislature. You will be responsible for its acts. See to it, first of all, that every man of that majority is in favor of the re-election of CHARLES SUMNER to the Senate of the United States. See to it, as next in importance, that no man is nominated whose course will be doubtful upon this question. If you are in favor of continuing this useless expenditure, select your candidate for that purpose. If you are against it, let that opposition be equally represented. Turn your backs on the jackals and jockies. Elect only men you can trust. Purify and elevate our legislation and deliver our politics from this demoralizing, debauching power. Banish from the State house the venal crew who make it cost a decent man all his self-respect to ask for common justice, and rescue the proud old Commonwealth from the connection which is eating up the substance of her people and poisoning the fountains of private and public morality.

P. S. Since the first edition was issued, the expressions of indignation, from the press and from members of the legislature, in relation to the attempt of the commissioners to violate the clear purpose of the law, have been so emphatic, that it is presumed the governor and council will approve no proposals for doing the work under separate contracts. There is little danger that the governor and council, *upon whom the legislature placed the entire responsibility of making this contract*, should divide this responsibility with the commissioners,—still less, that they will follow such blinded guides. It was a piece of assumption in the commissioners to advertise for proposals. The Act gave them no authority in the premises. Undoubtedly



the governor and council could employ those three persons as their agents, but as private individuals, not as commissioners; and they have no authority to sign the advertisement *as commissioners*, still less, to make any contract as such; and any contract made by them as commissioners is void *ab initio*. "The commissioners" are not mentioned or alluded to in the whole legislation relating to the tunnel, except in the last section of chapter 333, and then solely for the purpose of abolishing the board; and this was not accidental; for the legislature intended to give them no new power, but simply to allow them to close their affairs on the first of October, determined then to be rid of them.

I repeat, the entire responsibility of making a contract rests with the governor and council. "*They* are hereby authorized to contract for the whole work;" "in case a contract should be made by the governor and council, &c., &c." Sect. 2.—"The governor and council are hereby authorized to contract, &c., &c." Contracts for other work outside of the five million contract are made subject to the approval of the governor and council; all these expenditures, the issuing of the scrip, everything else is subject to their approval, but of this contract and the expenditure of the five millions they have original and sole control. It is their duty to make the contract, and the responsibility is upon them to carry out the intentions of the legislature. They must see that it is an honest contract; that it binds the contractor to complete *the entire road and tunnel* in seven years and for five millions, the contractor to take all risks, ordinary and extraordinary; that one-fifth of the price shall be reserved *till the completion of the work*, and that, *in addition to this reservation*, "satisfactory guarantees" shall be given. If, for instance, a bond for half a million should be taken as a "satisfactory guarantee," this amount cannot, without violating the manifest intention of the legislature, be deducted from the twenty per cent. reservation.

#### THIS IS ONLY THE BEGINNING OF THE END.

If this were the be all and end all; if, as the legislature intended, these five millions would finish the road and tunnel, and if, farther, we should then have a great commercial road, (without traffic, to be sure,) built and equipped with a double

track, capable of competing with existing lines, I would readily yield the five millions, if there were no cheaper method of severing the connection of the State with this pestilent power. But no such consummation can be expected.

I have shown on page 5 that on the basis of an honest contract for completing road and tunnel this five million appropriation will amount, including interest, before the road is open, to \$6,036,560 ; that adding the cost of double track to North Adams, and  $6\frac{80}{100}$  miles more beyond North Adams, of enlarging small tunnel beyond North Adams, of building the road west of the west portal, and of equipment, station houses, &c., &c., for the entire line, it will amount to over two millions more. This will bring the cost to over eight millions. But I have shown that the supposition that the road and tunnel, even to the west portal, can be finished for five millions is simply preposterous. Following as our only guide the experience of the past, considering the probable, the inevitable increase of cost as the work enters farther into the mountain, the conclusion is irresistible that the completion of this work will cost ten, twelve, fifteen millions.

#### TAX-PAYERS OF MASSACHUSETTS !

I leave this whole question with you. You are to elect the next legislature. I know full well what your verdict would be if the subject were referred directly to your votes. The control is equally in your hands through the senators and representatives. Examine the tables in the appendix, which give the amount which your town pays of a State tax of one million, multiply that amount by eight, ten, fifteen, and you will know what your citizens will be taxed, sooner or later, for this utterly fruitless enterprise, and decide whether you will send to the legislature senators and representatives who will impose this burden upon yourselves and your children. Examine the yeas and nays and spot the men who betrayed you last winter. There is only one thing to be done.

#### STOP THE SUPPLIES.

Stop this wicked waste of honestly earned money. Stop the work. If the tunnel is worth finishing, it is worth it only to the connecting roads,—the Troy and Boston, the Vermont and

Massachusetts and the Fitchburg. This enterprise benefits them alone. So long as they can corrupt your representatives, so long as they can, by whatever means, keep the State in this work, they will not lift a finger for its prosecution. They know that in the end it must fall into their hands, and their only aim is to extort ten or fifteen millions more from you. Say to them, "This road when finished is worth something to you; it is worth nothing to us; take it and be off." This is just what New York did with the Erie Railway. Having expended about four millions she stopped, gave it to the parties interested, and they finished it. These corporations will do the same thing if the road is worth finishing. If not worth finishing by them, for a still stronger reason, it is not worth finishing by the State. If they finish it, well; if not, let it stand forever as a warning to future generations against committing the Commonwealth to chimerical and ruinous enterprises.

Consider the uses to which the cost of the tunnel, fruitlessly squandered, might be applied. Of the admitted cost, Suffolk County will pay \$2,785,360; of the probable cost, she will pay \$4,222,550; she will pay, in annual perpetual interest, \$348,170. The proposition, which ought to have been adopted twenty years ago, is just now being discussed—that of founding in Boston a free college. The sum wasted on the tunnel would give such an institution a more munificent endowment than is received by any educational institution in the world. The sum to be paid by the whole State would endow, in every county in the State, a free college, with a larger income than any college in the State. Compare the blessings of a dozen such institutions, offering to every son and daughter of the Commonwealth the largest, most generous culture which money could command, *free*, with an expenditure without the slightest benefit. Commute these millions into the thousand beneficent purposes to which they might be applied,—tax yourselves for these purposes, if you will; but stop the throwing of other millions into this merciless Maelstrom.



## APPENDIX.

*Mr. Dana's Amendment—to strike out \$600,000.**Suffolk County.*

YEAS.	NAYS.
Sydney F. Whitehouse, Boston,	Dexter A. Tompkins, Boston,
Dennis Cawley, Jr., “	Hodgdon F. Buzzell, “
John M. Tobin, “	Thomas J. Gargan, “
Murdock Matheson, “	Dexter S. King, “
James L. Locke, “	John P. Ordway, “
Ellis W. Morton, “	Otis Rich, “
Linus M. Child, “	John J. Smith, “
Patrick A. Collins, “	P. Ambrose Young, “
Charles H. Blanchard, “	Newell A. Thompson, “
Noah M. Gaylord, “	James A. Fox, “
George F. Williams, “	Noble H. Hill, “
Samuel Freeman, Chelsea.	Henry Souther, “
	Thomas H. Carruth, Chelsea.

*Essex County.*

J. R. Huntington, Amesbury,	Charles W. Chase, Haverhill,
J. G. Tewksbury, West Newbury,	Albert Blood, Lawrence,
S. K. Towle, Haverhill,	Rufus Adams, Newburyport,
John Perley, Bradford,	Leonard McKenzie, Essex,
John K. Tarbox, Lawrence,	Edwin Mudge, Danvers,
Roscoe W. Gage, Boxford,	J. Warren Stevens, South Danvers,
G. W. Jackman, Jr., Newburyport,	William H. Burbeck, Salem,
George W. Woodwell, “	Thomas S. Waters, “
Joseph Ross, Ipswich,	William W. Kellogg, Lynn,
Benjamin F. Cook, Gloucester,	William Howland. “
Josiah O. Friend, “	
Moses Pool, Rockport,	
Joseph Wilson, Beverly,	
John Lee, Manchester,	
George H. Peirson, Salem,	
William B. Brown, Marblehead,	
Stephen C. Felton, “	
Benjamin Proctor, Lynn,	
Jacob P. Towne, Topsfield.	

*Middlesex County.*

YEAS.	NAYS.
Thomas Cunningham, Charlestown,	Rufus A. White, Charlestown,
John A. Hughes, Somerville,	William Sherburne, “
John Runey, “	Caleb Rand, “
George P. Cox, Malden,	James A. Hervey, Medford,
Joseph S. Potter, Arlington,	John McDuffie, Cambridge,
R. H. Dana, Jr., Cambridge,	Curtis Davis, “
George E. Allen, Newton,	George E. Bridges, Newton,
Royal S. Warren, Waltham,	Henry M. Clarke, Belmont,
Willard Mann, Natick,	Hugh R. Bean, Marlborough,
Francis E. Cushing, Holliston,	Francis W. Warren, Stow,
William Seaver, Ashland,	John C. Blasdel, Lexington,
George Phipps, Framingham,	Dudley Foster, Billerica,
Willard Wheeler, Sudbury,	Benjamin J. Williams, Lowell,
Levi S. Gould, Melrose,	James B. Francis, “
Nathan P. Pratt, Reading,	Josiah Gates, “
Oliver W. Smith, Lowell.	William McFarlin, “
	George W. Heywood, Westford,
	Levi Wallace, Pepperell,
	Jonathan Pierce, Townsend.

*Worcester County.*

A. G. Walker, Worcester,	Windsor N. White, Winchendon,
J. S. Woodworth, “	J. A. Rich, Royalston,
J. H. Wood, Grafton,	Charles Heywood, Gardner,
William Knowlton, Upton,	William Mixter, Hardwick,
Isaac H. Stearns, Milford,	J. Otis Hale, Hubbardston,
Moses Farnum, Blackstone,	George E. Towne, Fitchburg,
Lament B. Corbin, Oxford,	Otis T. Ruggles, “
William D. Jones, Douglas,	Howard M. Lane, Leominster,
J. H. Hathaway, Charlton,	Solomon H. Howe, Bolton,
Amasa C. Morse, Sturbridge,	Charles W. Worcester, Clinton,
Joseph B. Lombard, Warren.	Wallace McFarland, W. Boylston,
	P. A. Beaman, Princeton,
	D. A. Goddard, Worcester,
	Warren Williams, “
	Edward S. Stebbins, “
	P. A. Thompson, “
	Samuel Appleton, Southborough,
	Charles Wing, Uxbridge,
	Silas Dunton, Millbury,
	Lory S. Watson, Leicester.

*Hampshire County.*

YEAS.	NAYS.
William F. Arnold, Northampton,	Henry S. Porter, Hatfield,
Edward H. Lathrop, Huntington,	Horace Ward, Amherst.
Philo Chapin, Granby,	
Henry Bassett, Ware.	

*Hampden County.*

Joel B. Williams, Monson,	Thaddeus K. DeWolf, Chester.
William R. Sessions, Wilbraham,	
Charles L. Shaw, Springfield,	
Tilly Haynes, “	
George Walker, “	
Edwin N. Snow, Chicopee,	
Ezra H. Flagg, Holyoke,	
Ralph S. Brown, Granville,	
Charles A. Fox, W. Springfield,	
William G. Bates, Westfield.	

*Franklin County.*

John D. Flagg, Orange,  
 Frederick W. Field, Leverett,  
 George W. Potter, Greenfield,  
 Thomas J. Field, Northfield,  
 Henry S. Ranney, Ashfield,  
 Samuel T. Field, Shelburne,  
 Roger H. Leavitt, Charlemont.

*Berkshire County.*

Thomas F. Plunkett, Pittsfield,	Fred. A. Morey, Williamstown,
Edw'd A. Hulbert, G't Barrington,	Shepherd Thayer, Adams,
A. J. Freeman, New Marlborough.	Jonas A. Champney, Cheshire,
	Henry H. Cook, Richmond,
	Charles J. Kittredge, Hinsdale,
	Mason Van Dusen, Stockbridge,
	Alanson Crittenden, Otis.

*Norfolk County.*

John R. Bullard, Dedham,	Edw'd H. R. Ruggles, Dorchester,
Charles A. Hewins, W. Roxbury,	John H. Robinson, “
George M. Hobbs, Roxbury,	E. Watson Arnold, Braintree,
Isaac H. Meserve, “	Daniel Howard, Randolph,
John Quincy Adams, Quincy,	Joseph Leavitt, Canton,
Alvah Raymond, Jr., Weymouth,	Thomas Parsons, Brookline.



*Norfolk County—Con.*

## YEAS.

Henry Newton, Weymouth.  
 Orlando B. Crane, Stoughton,  
 Leander S. Daniels, Medway,  
 James T. Ford, Wrentham,  
 Henry E. Pond, Franklin,  
 George K. Daniell, Needham.

## NAYS.

*Bristol County.*

Augustus Lane, Norton,  
 John H. Swain, Easton,  
 Jeremy B. Dennett, Taunton,  
 Walter S. Sprague, “  
 William A. King, Rehoboth,  
 Abraham G. Hart, Fall River,  
 Weaver Osborn, “  
 Iram Smith, “  
 E. P. Brownell, Westport,  
 William Barker, Jr., Dartmouth,  
 Joseph W. Cornell, New Bedford,  
 James B. Wood, “  
 William H. Reynard. “

Job M. Leonard, Somerset,  
 Oliver H. P. Brown, New Bedford,  
 Lewis S. Judd, Fairhaven,

*Plymouth County.*

David Cushing, 2d, Hingham,  
 Morton V. Bonney, Hanover,  
 Josiah S. Hammond, Plympton,  
 George Sandford, Wareham,  
 Levi A. Abbott, Middleborough,  
 Simeon Perkins, Bridgewater,  
 C. C. Bixby, North Bridgewater.

John Manson, Scituate,  
 Eden Wadsworth, Duxbury,  
 Charles H. Drew, Plymouth,  
 Walter B. Studley, Abington,  
 Dan Packard, “

*Barnstable County.*

Heman B. Chase, Yarmouth,  
 Alvah Holway, Sandwich,  
 Lemuel B. Simmons, Barnstable,  
 Seth Crowell, Dennis,  
 Ensign B. Rogers, Orleans.

Samuel H. Gould, Brewster,  
 Henry Shortle, Provincetown.

*Dukes County.*

Charles Bradley, Tisbury.

*Nantucket County.*

William H. Waite, Nantucket.

Yeas, 114 ; Nays, 95.

## ABSENT OR NOT VOTING.

Charles R. Train, Boston,	Anson P. Hooker, Cambridge,
Hiram S. Shurtleff, “	Charles H. Fiske, Weston,
Daniel H. Whitney, “	David D. Hart, Woburn,
H. Jewell, (Speaker,) “	J. F. Mansfield, South Reading,
Thomas J. Fay, “	Richmond Kingman, Cummington,
Nathaniel C. Nash, “	John Severson, Springfield,
Edward H. Pierce, “	William Seaver, Roxbury,
Charles W. Wilder, “	Charles Stanwood, “
Hubbard W. Tilton, “	Willard Blackinton, Attleborough,
J. W. F. Willson, “	Eben N. Wardwell, Swampscott,
Charles Bird, Jr., North Chelsea,	Nathan S. Williams, Taunton,
W. H. P. Wright, Lawrence,	William Whiting, Pembroke,
John A. Wiley, North Andover,	Eleazer Richmond, Lakeville,
George H. Long, Charlestown,	Irving Bates, E. Bridgewater,
John Livermore, Cambridge,	John H. Bangs, Eastham.

*Third Reading.**Suffolk County.*

YEAS.	NAYS.
Dexter A. Tompkins, Boston,	Sydney F. Whitehouse, Boston,
Hodgdon F. Buzzell, “	James L. Locke, “
Dennis Cawley, Jr., “	George F. Williams, “
Thomas J. Gargan, “	John M. Tobin, “
Dexter S. King, “	Samuel Freeman, Chelsea.
Ellis W. Morton, “	
John P. Ordway, “	
Otis Rich, “	
Linus M. Child, “	
John J. Smith, “	
Patrick A. Collins, “	
Charles H. Blanchard, “	
Noah M. Gaylord, “	
P. Ambrose Young, “	
Newell A. Thompson, “	
James A. Fox, “	
Henry Souther, “	
Thomas H. Carruth, Chelsea.	

*Essex County.*

Charles W. Chase, Haverhill,	J. R. Huntington, Amesbury,
Albert Blood, Lawrence,	Ja's G. Tewksbury, W. Newbury,
Rufus Adams, Newburyport,	S. K. Towle, Haverhill,

*Essex County—Con.*

## YEAS.

Leonard McKenzie, Essex,  
 Edwin Mudge, Danvers,  
 J. Warren Stevens, So. Danvers,  
 George H. Peirson, Salem,  
 William H. Burbeck, "  
 Thomas S. Waters, "  
 William W. Kellogg, Lynn,  
 William Howland, "

## NAYS.

John Perley, Bradford,  
 Roscoe W. Gage, Boxford,  
 G. W. Jackman, Jr., Newburyport,  
 George W. Woodwell, "  
 Joseph Ross, Ipswich,  
 Benjamin F. Cook, Gloucester,  
 Josiah O. Friend, "  
 Moses Pool, Rockport,  
 Joseph Wilson, Beverly,  
 John Lee, Manchester,  
 William B. Brown, Marblehead,  
 Stephen C. Felton, "  
 Benjamin Proctor, Lynn.

*Middlesex County.*

Thomas Cunningham, Charlestown,  
 Rufus A. White, "  
 William Sherburne, "  
 Caleb Rand, "  
 George P. Cox, Malden,  
 James A. Hervey, Medford,  
 John McDuffie, Cambridge,  
 Curtis Davis, "  
 George E. Allen, Newton,  
 George E. Bridges, "  
 Henry M. Clarke, Belmont,  
 Francis E. Cushing, Holliston,  
 Hugh R. Bean, Marlborough,  
 Francis W. Warren, Stow,  
 Charles H. Fiske, Weston,  
 John C. Blasdel, Lexington,  
 Levi S. Gould, Melrose,  
 Nathan P. Pratt, Reading,  
 Dudley Foster, Billerica,  
 Benjamin J. Williams, Lowell,  
 James B. Francis, "  
 Josiah Gates, "  
 William McFarlin, "  
 George W. Heywood, Westford,  
 Levi Wallace, Pepperell,  
 Jonathan Pierce, Townsend.

John A. Hughes, Somerville,  
 John Runey, "  
 Joseph S. Potter, Arlington,  
 R. H. Dana, Jr., Cambridge,  
 Anson P. Hooker, "  
 Royal S. Warren, Waltham,  
 Willard Mann, Natick,  
 William Seaver, Ashland,  
 George Phipps, Framingham,  
 Willard Wheeler, Sudbury,  
 Oliver W. Smith, Lowell.



*Worcester County.*

## YEAS.

Windsor N. White, Winchendon,  
 J. A. Rich, Royalston,  
 Charles Heywood, Gardner,  
 William Mixter, Hardwick,  
 J. Otis Hale, Hubbardston,  
 George E. Towne, Fitchburg,  
 Otis T. Ruggles, " "  
 Howard M. Lane, Leominster,  
 Solomon H. Howe, Bolton,  
 Charles W. Worcester, Clinton,  
 Wallace McFarland, W. Boylston,  
 P. A. Beaman, Princeton,  
 D. A. Goddard, Worcester,  
 Warren Williams, "  
 Edward S. Stebbins, "  
 P. A. Thompson, "  
 Samuel Appleton, Southborough,  
 Silas Dunton, Millbury,  
 Lory S. Watson, Leicester.

## NAYS.

A. G. Walker, Worcester,  
 J. S. Woodworth, "  
 J. H. Wood, Grafton,  
 William Knowlton, Upton,  
 Isaac H. Stearns, Milford,  
 Moses Farnum, Blackstone,  
 Lament B. Corbin, Oxford,  
 William D. Jones, Douglas,  
 Amasa C. Morse, Sturbridge,  
 Joseph B. Lombard, Warren.

*Hampshire County*

Henry S. Porter, Hatfield,  
 Horace Ward, Amherst.

William F. Arnold, Northampton,  
 Edward H. Lathrop, Huntington,  
 Henry Bassett, Ware.

*Hampden County.*

Thaddeus K. DeWolf, Chester.

Joel B. Williams, Monson,  
 William R. Sessions, Wilbraham,  
 Charles L. Shaw, Springfield,  
 Tilly Haynes, "  
 George Walker, "  
 Edwin N. Snow, Chicopee,  
 Ezra H. Flagg, Holyoke,  
 Ralph S. Brown, Granville,  
 Charles A. Fox, W. Springfield,  
 William G. Bates, Westfield.

*Franklin County.*

John D. Flagg, Orange,  
 Frederick W. Field, Leverett,  
 George W. Potter, Greenfield,

*Franklin County.—Con.*

YEAS.  
 Thomas J. Field, Northfield,  
 Henry S. Ranney, Ashfield,  
 Samuel T. Field, Shelburne,  
 Roger H. Leavitt, Charlemont.

NAYS.

*Berkshire County.*

Fred. A. Morey, Williamstown,  
 Shepherd Thayer, Adams,  
 Jonas A. Champney, Cheshire,  
 Henry H. Cook, Richmond,  
 Charles J. Kittredge, Hinsdale,  
 Mason Van Dusen, Stockbridge,  
 Alanson Crittenden, Otis,  
 A. J. Freeman, New Marlborough.

Thomas F. Plunkett, Pittsfield,  
 Edw'd A. Hulbert, Gt. Barrington.

*Norfolk County.*

George M. Hobbs, Roxbury,  
 Edw'd H. R. Ruggles, Dorchester,  
 John H. Robinson, "  
 E. Watson Arnold, Braintree,  
 Daniel Howard, Randolph,  
 Joseph Leavitt, Canton,  
 Thomas Parsons, Brookline.

John R. Bullard, Dedham,  
 Charles A. Hewins, W. Roxbury,  
 Isaac H. Meserve, Roxbury,  
 John Quincy Adams, Quincy,  
 Alvah Raymond, Jr., Weymouth,  
 Henry Newton, "  
 Orlando B. Crane, Stoughton,  
 Leander S. Daniels, Medway,  
 James T. Ford, Wrentham,  
 George K. Daniell, Needham.

*Bristol County.*

John H. Swain, Easton,  
 Nathan S. Williams, Taunton,  
 Oliver H. P. Brown, N. Bedford,  
 Lewis S. Judd, Fairhaven.

Augustus Lane, Norton,  
 Jeremy B. Dennett, Taunton,  
 Walter S. Sprague, "  
 William A. King, Rehoboth,  
 Abraham G. Hart, Fall River,  
 Weaver Osborn, "  
 Iram Smith, "  
 E. P. Brownell, Westport,  
 William Barker, Jr., Dartmouth,  
 Joseph W. Cornell, New Bedford,  
 James B. Wood, "  
 William H. Reynard, "

*Plymouth County*

YEAS.	NAYS.
John Manson, Scituate,	David Cushing, 2d, Hingham,
Eden Wadsworth, Duxbury,	Morton V. Bonney, Hanover,
Charles H. Drew, Plymouth,	Josiah S. Hammond, Plympton,
C. C. Bixby, North Bridgewater,	George Sandford, Wareham,
Walter B. Studley, Abington,	Levi A. Abbott, Middleborough,
Dan Packard, “	Simeon Perkins, Bridgewater.

*Barnstable County.*

Samuel H. Gould, Brewster,	Heman B. Chase, Yarmouth,
Henry Shortle, Provincetown.	Alvah Holway, Sandwich,
	Lemuel B. Simmons, Barnstable,
	Seth Crowell, Dennis,
	Ensign B. Rogers, Orleans.

*Dukes County.*

Charles Bradley, Tisbury.
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*Nantucket County.*

William H. Waitt, Nantucket.
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Yeas, 111 ; Nays, 92.

## ABSENT OR NOT VOTING.

Murdock Matheson, Boston,	John Livermore, Cambridge,
Charles R. Train, “	David D. Hart, Woburn,
Hiram S. Shurtleff, “	J. F. Mansfield, South Reading,
Daniel H. Whitney, “	Charles Wing, Uxbridge,
H. Jewell, (Speaker,) “	J. H. Hathaway, Charlton,
Thomas J. Fay, “	Richmond Kingman, Cummington,
Nathaniel C. Nash, “	Philo Chapin, Granby,
Edward H. Pierce, “	John Severson, Springfield,
Noble H. Hill, “	William Seaver, Roxbury,
Charles W. Wilder, “	Charles Stanwood, “
Hubbard W. Tilton, “	Henry E. Pond, Franklin,
J. W. F. Willson, “	Willard Blackinton, Attleborough,
Charles Bird, Jr., North Chelsea,	Job M. Leonard, Somerset,
W. H. P. Wright, Lawrence,	William Whiting, Pembroke,
John K. Tarbox, “	Eleazer Richmond, Lakeville,
John A. Wiley, North Andôver,	Irving Bates, East Bridgewater,
Jacob P. Towne, Topsfield,	John H. Bangs, Eastham,
George H. Long, Charlestown,	Eben N. Wardwell, Swampscott.



## YEAS AND NAYS IN THE SENATE.

*Third Reading.*

YEAS.—Messrs. Alexander,	Bowerman,	Brooks,
Chaffee,	Clark,	Crane,
Crocker,	Gaston,	Gould,
Ingalls,	McPhail,	Mudge,
Oliver,	Penniman,	Pond,
Sawyer,	Schouler,	Smith,
Stevens,	Sutton,	Wilcox,
Wheeler.—22.		
NAYS.—Messrs. Allen,	Brown,	Chace,
Dame,	Fuller,	Pitman,
Snow,	Tweed.—8	

*Enactment.*

YEAS.—Messrs. Alexander,	Bowerman,	Brooks,
Clark,	Crane,	Crocker,
Fay,	Gaston,	Gould,
Ingalls,	McPhail,	Mudge,
Oliver,	Penniman,	Pond,
Sawyer,	Schouler,	Smith,
Sutton,	Wilcox,	Wheeler.—21.
NAYS.—Messrs. Allen,	Avery,	Chace,
Cheever,	Clafin,	Dame,
Fuller,	Giles,	Pitman,
Tweed.—10.		

The following senators did not vote on either question:—  
Messrs. Brastow, Needham, Partridge, Todd and Weston.

## BASIS OF TAXATION UNTIL 1875.

[Established by Chapter 181, Acts of 1865.]

## COUNTY OF SUFFOLK.

TOWNS.	Property.	Tax of \$1,000, including polls at 1-2 mill each.	Amounts paid by each Town of a Tax of \$1,000,000.
Boston, . . .	\$378,303,357 00	\$338 83	\$338,830 00
Chelsea, . . .	7,706,745 00	8 05	8,050 00
North Chelsea, . . .	860,359 00	84	840 00
Winthrop, . . .	406,239 00	45	450 00
Totals, . . .	\$387,276,700 00	\$348 17	\$348,170 00

## COUNTY OF ESSEX.

Amesbury, . . .	\$1,677,632 00	\$1 94	\$1,940 00
Andover, . . .	2,702,426 00	2 85	2,850 00
Beverly, . . .	3,359,216 00	3 67	3,670 00
Boxford, . . .	631,942 00	65	650 00
Bradford, . . .	832,083 00	91	910 00
Danvers, . . .	2,237,630 00	2 43	2,430 00
Essex, . . .	912,417 00	1 00	1,000 00
Georgetown, . . .	760,473 00	89	890 00
Gloucester, . . .	4,505,390 00	5 09	5,090 00
Groveland, . . .	666,119 00	77	770 00
Hamilton, . . .	481,423 00	50	500 00
Haverhill, . . .	4,488,107 00	5 13	5,130 00
Ipswich, . . .	1,556,491 00	1 67	1,670 00
Lawrence, . . .	11,240,191 00	11 42	11,420 00
Lynn, . . .	10,053,309 00	10 42	10,420 00
Lynnfield, . . .	604,617 00	62	620 00
Manchester, . . .	766,383 00	85	850 00
Marblehead, . . .	2,131,268 00	2 78	2,780 00
Methuen, . . .	1,292,951 00	1 42	1,420 00
Middleton, . . .	392,445 00	42	420 00
Nahant, . . .	517,194 00	48	480 00
Newbury, . . .	767,849 00	80	800 00
Newburyport, . . .	7,659,960 00	7 80	7,800 00
North Andover, . . .	1,830,829 00	1 88	1,880 00
Rockport, . . .	1,279,717 00	1 48	1,480 00
Rowley, . . .	511,171 00	58	580 00
Salem, . . .	16,192,359 00	15 97	15,970 00
Salisbury, . . .	1,680,689 00	1 83	1,830 00
Saugus, . . .	1,300,074 00	1 33	1,330 00
South Danvers, . . .	3,819,766 00	3 97	3,970 00
Swampscott, . . .	1,449,859 00	1 42	1,420 00
Topsfield, . . .	687,610 00	73	730 00
Wenham, . . .	463,558 00	50	500 00
West Newbury, . . .	940,919 00	1 05	1,050 00
Totals, . . .	\$90,393,467 00	\$95 25	\$95,250 00

## COUNTY OF MIDDLESEX.

TOWNS.	Property.	Tax of \$1,000, including polls at 1-2 mill each.	Amounts paid by each Town of a Tax of \$1,000,000.
Acton, . . . .	\$854,719 00	\$0 92	\$920 00
Ashby, . . . .	508,393 00	58	580 00
Ashland, . . . .	632,632 00	76	760 00
Bedford, . . . .	489,123 00	52	520 00
Belmont, . . . .	3,521,429 00	3 17	3,170 00
Billerica, . . . .	1,086,563 00	1 13	1,130 00
Boxborough, . . . .	238,592 00	26	260 00
Brighton, . . . .	3,812,694 00	3 70	3,700 00
Burlington, . . . .	408,136 00	43	430 00
Cambridge, . . . .	25,897,971 00	25 21	25,210 00
Carlisle, . . . .	354,122 00	38	380 00
Charlestown, . . . .	18,292,544 00	18 48	18,480 00
Chelmsford, . . . .	1,546,508 00	1 58	1,580 00
Concord, . . . .	1,658,881 00	1 67	1,670 00
Dracut, . . . .	1,109,304 00	1 20	1,200 00
Dunstable, . . . .	391,146 00	40	400 00
Framingham, . . . .	2,799,308 00	2 90	2,900 00
Groton, . . . .	1,553,920 00	1 70	1,700 00
Holliston, . . . .	1,502,682 00	1 69	1,690 00
Hopkinton, . . . .	1,595,257 00	1 83	1,830 00
Lexington, . . . .	1,747,459 00	1 77	1,770 00
Lincoln, . . . .	606,833 00	62	620 00
Littleton, . . . .	632,380 00	66	660 00
Lowell, . . . .	20,980,041 00	20 74	20,740 00
Malden, . . . .	4,040,431 00	4 26	4,260 00
Marlborough, . . . .	2,530,622 00	3 06	3,060 00
Medford, . . . .	5,491,054 00	5 31	5,310 00
Melrose, . . . .	1,704,583 00	1 79	1,790 00
Natick, . . . .	1,841,121 00	2 15	2,150 00
Newton, . . . .	9,800,738 00	9 37	9,370 00
North Reading, . . . .	577,389 00	64	640 00
Pepperell, . . . .	924,405 00	1 01	1,010 00
Reading, . . . .	1,293,056 00	1 40	1,400 00
Sherborn, . . . .	869,539 00	88	880 00
Shirley, . . . .	676,275 00	73	730 00
Somerville, . . . .	5,683,244 00	5 76	5,760 00
South Reading, . . . .	1,778,786 00	1 88	1,880 00
Stoneham, . . . .	1,333,637 00	1 57	1,570 00
Stow, . . . .	764,278 00	84	840 00
Sudbury, . . . .	1,052,778 00	1 10	1,100 00
Tewksbury, . . . .	747,624 00	78	780 00
Townsend, . . . .	737,352 00	89	890 00
Tyngsborough, . . . .	348,137 00	37	370 00
Waltham, . . . .	5,552,109 00	5 43	5,430 00
Watertown, . . . .	2,757,957 00	2 79	2,790 00
Wayland, . . . .	658,073 00	70	700 00
West Cambridge, . . . .	2,833,684 00	2 77	2,770 00
Westford, . . . .	998,438 00	1 04	1,040 00
Weston, . . . .	1,103,274 00	1 09	1,090 00
Wilmington, . . . .	563,181 00	59	590 00
Winchester, . . . .	1,455,772 00	1 46	1,460 00
Woburn, . . . .	4,986,549 00	5 25	5,250 00
Totals, . . . .	\$155,324,723 00	\$157 21	\$157,210 00



## COUNTY OF WORCESTER.

TOWNS.	Property.	Tax of \$1,000, including polls at 1-2 mill each,	Amounts paid by each Town of a Tax of \$1,000,000.
Ashburnham, . . .	\$789,081 00	\$0 94	\$940 00
Athol, . . . . .	1,085,516 00	1 31	1,310 00
Auburn, . . . . .	503,928 00	54	540 00
Barre, . . . . .	1,797,762 00	1 89	1,890 00
Berlin, . . . . .	401,831 00	47	470 00
Blackstone, . . . .	1,993,024 00	2 31	2,310 00
Bolton, . . . . .	636,514 00	73	730 00
Boylston, . . . . .	467,551 00	50	500 00
Brookfield, . . . .	973,359 00	1 12	1,120 00
Charlton, . . . . .	909,729 00	1 01	1,010 00
Clinton, . . . . .	2,017,299 00	2 10	2,100 00
Dana, . . . . .	242,117 00	30	300 00
Douglas, . . . . .	871,651 00	1 01	1,010 00
Dudley, . . . . .	681,471 00	78	780 00
Fitchburg, . . . . .	4,240,252 00	4 58	4,580 00
Gardner, . . . . .	905,324 00	1 09	1,090 00
Grafton, . . . . .	1,777,973 00	1 99	1,990 00
Hardwick, . . . . .	1,099,438 00	1 15	1,150 00
Harvard, . . . . .	932,514 00	99	990 00
Holden, . . . . .	853,695 00	94	940 00
Hubbardston, . . . .	741,433 00	81	810 00
Lancaster, . . . . .	1,004,802 00	1 05	1,050 00
Leicester, . . . . .	1,615,868 00	1 70	1,700 00
Leominster, . . . .	1,933,122 00	2 07	2,070 00
Lunenburg, . . . . .	731,560 00	77	770 00
Mendon, . . . . .	668,709 00	72	720 00
Milford, . . . . .	3,275,231 00	4 06	4,060 00
Millbury, . . . . .	1,392,456 00	1 59	1,590 00
New Braintree, . . . .	553,709 00	57	570 00
North Brookfield, . .	1,034,978 00	1 18	1,180 00
Northborough, . . . .	898,385 00	93	930 00
Northbridge, . . . .	1,104,648 00	1 25	1,250 00
Oakham, . . . . .	318,003 00	38	380 00
Oxford, . . . . .	1,137,476 00	1 29	1,290 00
Paxton, . . . . .	297,237 00	34	340 00
Petersham, . . . . .	615,779 00	75	750 00
Phillipston, . . . . .	320,834 00	36	360 00
Princeton, . . . . .	778,666 00	82	820 00
Royalston, . . . . .	711,872 00	78	780 00
Rutland, . . . . .	523,646 00	58	580 00
Shrewsbury, . . . . .	1,026,968 00	1 08	1,080 00
Southborough, . . . .	957,409 00	1 03	1,030 00
Southbridge, . . . . .	1,696,264 00	1 89	1,890 00
Spencer, . . . . .	1,363,465 00	1 57	1,570 00
Sterling, . . . . .	1,087,710 00	1 13	1,130 00
Sturbridge, . . . . .	864,875 00	98	980 00
Sutton, . . . . .	1,141,588 00	1 24	1,240 00
Templeton, . . . . .	979,116 00	1 16	1,160 00
Upton, . . . . .	736,082 00	87	870 00
Uxbridge, . . . . .	1,624,174 00	1 72	1,720 00
Warren, . . . . .	985,109 00	1 13	1,130 00

COUNTY OF WORCESTER—*Concluded.*

TOWNS.	Property.	Tax of \$1,000, including polls at 1-2 mill each.	Amounts paid by each Town of a Tax of \$1,000,000.
Webster, . . .	\$1,060,039 00	\$1 26	\$1,260 00
West Boylston, . .	860,922 00	98	980 00
West Brookfield, . .	679,389 00	77	770 00
Westborough, . . .	1,337,740 00	1 51	1,510 00
Westminster, . . .	721,267 00	81	810 00
Winchendon, . . .	1,160,952 00	1 39	1,390 00
Worcester, . . .	19,701,244 00	20 43	20,430 00
Totals, . . .	\$80,857,766 00	\$88 70	\$88,700 00

## COUNTY OF HAMPSHIRE.

Amherst, . . .	\$1,860,457 00	\$1 95	\$1,950 00
Belchertown, . . .	1,108,591 00	1 27	1,270 00
Chesterfield, . . .	372,790 00	43	430 00
Cummington, . . .	342,842 00	41	410 00
Easthampton, . . .	1,700,599 00	1 70	1,700 00
Enfield, . . .	610,644 00	64	640 00
Goshen, . . .	152,796 00	18	180 00
Granby, . . .	470,125 00	52	520 00
Greenwich, . . .	261,416 00	30	300 00
Hadley, . . .	1,279,320 00	1 36	1,360 00
Hatfield, . . .	1,442,691 00	1 42	1,420 00
Huntington, . . .	409,395 00	48	480 00
Middlefield, . . .	351,882 00	39	390 00
Northampton, . . .	4,789,965 00	4 92	4,920 00
Pelham, . . .	197,457 00	25	250 00
Plainfield, . . .	239,097 00	29	290 00
Prescott, . . .	221,712 00	26	260 00
South Hadley, . . .	1,103,491 00	1 19	1,190 00
Southampton, . . .	502,448 00	56	560 00
Ware, . . .	1,306,545 00	1 48	1,480 00
Westhampton, . . .	291,384 00	31	310 00
Williamsburg, . . .	1,095,693 00	1 17	1,170 00
Worthington, . . .	409,655 00	46	460 00
Totals, . . .	\$20,510,994 00	\$21 94	\$21,940 00

## COUNTY OF HAMPDEN.

Agawam, . . .	\$816,850 00	\$0 90	\$900 00
Blandford, . . .	529,150 00	60	600 00
Brimfield, . . .	719,750 00	77	770 00
Chester, . . .	445,900 00	54	540 00
Chicopee, . . .	3,128,250 00	3 56	3,560 00
Granville, . . .	516,277 00	61	610 00
Holland, . . .	131,000 00	15	150 00

COUNTY OF HAMPDEN—*Concluded.*

TOWNS.	Property.	Tax of \$1,000, including polls at 1-2 mill each.	Amounts paid by each Town of a Tax of \$1,000,000.
Holyoke, . . .	\$2,579,250 00	\$2 77	\$2,770 00
Longmeadow, . . .	1,016,500 00	1 05	1,050 00
Ludlow, . . .	455,050 00	52	520 00
Monson, . . .	1,316,700 00	1 43	1,430 00
Montgomery, . . .	158,850 00	18	180 00
Palmer, . . .	1,254,000 00	1 43	1,430 00
Russell, . . .	212,800 00	25	250 00
Southwick, . . .	604,200 00	66	660 00
Springfield, . . .	13,379,212 00	14 25	14,250 00
Tolland, . . .	298,588 00	32	320 00
Wales, . . .	254,600 00	29	290 00
Westfield, . . .	3,244,600 00	3 52	3,520 00
West Springfield, . . .	1,319,550 00	1 38	1,380 00
Wilbraham, . . .	872,100 00	98	980 00
Totals, . . .	\$33,253,117 00	\$36 16	\$36,160 00

## COUNTY OF FRANKLIN.

Ashfield, . . .	\$611,869 00	\$0 68	\$680 00
Bernardston, . . .	484,893 00	52	520 00
Buckland, . . .	526,468 00	67	670 00
Charlemont, . . .	367,216 00	43	430 00
Colrain, . . .	637,954 00	72	720 00
Conway, . . .	703,919 00	80	800 00
Deerfield, . . .	1,215,423 00	1 38	1,380 00
Erving, . . .	173,229 00	21	210 00
Gill, . . .	390,569 00	42	420 00
Greenfield, . . .	1,899,806 00	2 00	2,000 00
Hawley, . . .	182,638 00	30	300 00
Heath, . . .	232,551 00	27	270 00
Leverett, . . .	284,644 00	34	340 00
Leyden, . . .	278,647 00	30	300 00
Monroe, . . .	79,375 00	10	100 00
Montague, . . .	606,737 00	70	700 00
New Salem, . . .	336,476 00	42	420 00
Northfield, . . .	712,054 00	81	810 00
Orange, . . .	599,243 00	77	770 00
Rowe, . . .	180,425 00	21	210 00
Shelburne, . . .	822,620 00	89	890 00
Shutesbury, . . .	219,250 00	27	270 00
Sunderland, . . .	413,827 00	46	460 00
Warwick, . . .	220,658 00	32	320 00
Wendell, . . .	201,657 00	24	240 00
Whately, . . .	665,972 00	72	720 00
Totals, . . .	\$13,048,120 00	\$14 95	\$14,950 00



## COUNTY OF BERKSHIRE.

TOWNS.	Property.	Tax of \$1,000, including polls at 1-2 mill each.	Amounts paid by each Town of a Tax of \$1,000,000.
Adams, . . .	\$3,350,551 00	\$3 06	\$3,660 00
Alford, . . .	340,490 00	35	350 00
Becket, . . .	478,120 00	57	570 00
Cheshire, . . .	675,997 00	78	780 00
Clarksburg, . . .	133,234 00	16	160 00
Dalton, . . .	988,160 00	96	960 00
Egremont, . . .	587,619 00	61	610 00
Florida, . . .	152,323 00	28	280 00
Great Barrington, . . .	2,177,071 00	2 31	2,310 00
Hancock, . . .	490,299 00	50	500 00
Hinsdale, . . .	801,755 00	86	860 00
Lanesborough, . . .	661,048 00	71	710 00
Lee, . . .	1,682,411 00	1 84	1,840 00
Lenox, . . .	827,539 00	90	900 00
Monterey, . . .	292,117 00	34	340 00
Mount Washington, . . .	87,676 00	10	100 00
New Ashford, . . .	108,662 00	11	110 00
New Marlborough, . . .	610,727 00	71	710 00
Otis, . . .	311,595 00	40	400 00
Peru, . . .	214,930 00	24	240 00
Pittsfield, . . .	6,378,878 00	6 48	6,480 00
Richmond, . . .	502,277 00	55	550 00
Sandisfield, . . .	612,943 00	69	690 00
Savoy, . . .	273,400 00	34	340 00
Sheffield, . . .	1,206,820 00	1 31	1,310 00
Stockbridge, . . .	1,323,883 00	1 33	1,330 00
Tyringham, . . .	299,594 00	33	330 00
Washington, . . .	289,398 00	33	330 00
West Stockbridge, . . .	613,816 00	72	720 00
Williamstown, . . .	1,160,587 00	1 26	1,126 00
Windsor, . . .	303,324 00	35	350 00
Totals, . . .	\$27,937,444 00	\$30 08	\$30,080 00

## COUNTY OF NORFOLK.

Bellingham, . . .	\$463,951 00	\$0 54	\$540 00
Braintree, . . .	1,582,530 00	1 79	1,790 00
Brookline, . . .	12,107,550 00	10 85	10,850 00
Canton, . . .	2,211,313 00	2 28	2,280 00
Cohasset, . . .	1,174,953 00	1 25	1,250 00
Dedham, . . .	4,857,587 00	4 96	4,960 00
Dorchester, . . .	12,521,038 00	11 94	11,940 00
Dover, . . .	358,774 00	38	380 00
Foxborough, . . .	1,284,524 00	1 42	1,420 00
Franklin, . . .	1,046,874 00	1 16	1,160 00
Medfield, . . .	613,155 00	66	660 00
Medway, . . .	2,251,393 00	1 43	1,430 00
Milton, . . .	4,271,263 00	3 93	3,930 00

COUNTY OF NORFOLK—*Concluded.*

TOWNS.	Property.	Tax of \$1,000, including polls at 1-2 mill each.	Amounts paid by each Town of a Tax of \$1,000,000.
Needham, . . .	\$1,798,498 00	\$1 86	\$1,860 00
Quincy, . . .	3,833,508 00	3 97	3,970 00
Randolph, . . .	2,925,254 00	3 16	3,160 00
Roxbury, . . .	23,808,776 00	22 74	22,740 00
Sharon, . . .	723,752 00	79	790 00
Stoughton, . . .	1,742,453 00	2 02	2,020 00
Walpole, . . .	1,132,102 00	1 22	1,220 00
West Roxbury, . . .	10,631,146 00	9 79	9,790 00
Weymouth, . . .	3,345,394 00	3 95	3,950 00
Wrentham, . . .	1,412,051 00	1 54	1,540 00
Totals, . . .	\$95,097,794 00	\$93 66	\$93,660 00

## COUNTY OF BRISTOL.

Acushnet, . . .	\$656,500 00	\$0 70	\$700 00
Attleborough, . . .	2,201,660 00	2 54	2,540 00
Berkley, . . .	316,002 00	37	370 00
Dartmouth, . . .	2,432,270 00	2 48	2,480 00
Dighton, . . .	776,779 00	90	900 00
Easton, . . .	1,930,900 00	2 04	2,040 00
Fairhaven, . . .	1,778,217 00	1 84	1,840 00
Fall River, . . .	12,632,419 00	12 92	12,920 00
Freetown, . . .	706,117 00	77	770 00
Mansfield, . . .	750,442 00	90	900 00
New Bedford, . . .	20,525,790 00	19 77	19,770 00
Norton, . . .	842,527 00	94	940 00
Raynham, . . .	1,115,026 00	1 15	1,150 00
Rehoboth, . . .	764,906 00	86	860 00
Seekonk, . . .	496,844 00	54	540 00
Somerset, . . .	865,618 00	97	970 00
Swansey, . . .	755,680 00	82	820 00
Taunton, . . .	8,463,074 00	8 85	8,850 00
Westport, . . .	1,453,897 00	1 59	1,590 00
Totals, . . .	\$59,464,688 00	\$60 95	\$60,950 00

## COUNTY OF PLYMOUTH.

Abington, . . .	\$3,059,801 00	\$3 71	\$3,710 00
Bridgewater, . . .	1,992,756 00	2 18	2,180 00
Carver, . . .	459,583 00	53	530 00
Duxbury, . . .	1,006,782 00	1 18	1,180 00
East Bridgewater, . . .	1,136,937 00	1 42	1,420 00
Halifax, . . .	354,039 00	40	400 00
Hanover, . . .	747,591 00	83	830 00
Hanson, . . .	458,168 00	54	540 00
Hingham, . . .	2,391,437 00	2 53	2,530 00
Hull, . . .	150,864 00	16	160 00

COUNTY OF PLYMOUTH—*Concluded.*

TOWNS.	Property.	Tax of \$1,000, including polls at 1-2 mill each.	Amounts paid by each Town of a Tax of \$1,000,000.
Kingston, . . .	\$1,334,298 00	\$1 34	\$1,340 00
Lakeville, . . .	571,124 00	64	640 00
Marion, . . .	459,009 00	51	510 00
Marshfield, . . .	853,777 00	94	940 00
Mattapoissett, . . .	540,118 00	95	950 00
Middleborough, . . .	2,132,878 00	2 44	2,440 00
North Bridgewater, . .	2,209,339 00	2 71	2,710 00
Pembroke, . . .	575,993 00	68	680 00
Plymouth, . . .	3,145,119 00	3 41	3,410 00
Plympton, . . .	304,305 00	36	360 00
Rochester, . . .	547,181 00	63	630 00
Scituate, . . .	852,105 00	1 03	1,030 00
South Scituate, . . .	840,924 00	91	910 00
Wareham, . . .	882,580 00	1 09	1,090 00
West Bridgewater, . .	945,350 00	1 02	1,020 00
Totals, . . .	\$27,932,058 00	\$31 84	\$31,840 00

## COUNTY OF BARNSTABLE.

Barnstable, . . .	\$2,265,407 00	\$2 48	\$2,480 00
Brewster, . . .	801,452 00	84	840 00
Chatham, . . .	1,100,543 00	1 27	1,270 00
Dennis, . . .	1,181,339 00	1 38	1,380 00
Eastham, . . .	219,948 00	29	290 00
Falmouth, . . .	1,375,661 00	1 50	1,500 00
Harwich, . . .	1,025,217 00	1 28	1,280 00
Orleans, . . .	558,858 00	70	700 00
Provincetown, . . .	1,576,145 00	1 74	1,740 00
Sandwich, . . .	1,669,105 00	1 85	1,850 00
Truro, . . .	361,717 00	52	520 00
Wellfleet, . . .	700,165 00	88	880 00
Yarmouth, . . .	1,440,641 00	1 52	1,520 00
Totals, . . .	\$14,276,198 00	\$16 25	\$16,250 00

## COUNTY OF DUKES.

Chilmark, . . .	\$350,801 00	\$0 38	\$380 00
Edgartown, . . .	1,035,467 00	1 13	1,130 00
Gosnold, . . .	112,993 00	11	110 00
Tisbury, . . .	684,714 00	79	790 00
Totals, . . .	\$2,183,975 00	\$2 41	\$2,410 00

## COUNTY OF NANTUCKET.

Nantucket, . . .	\$2,152,568 00	\$2 43	\$2,430 00
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On the third reading the vote by Counties was as follows:—

	Yeas.	Nays.		Yeas.	Nays.
Suffolk, . . .	18	5	Berkshire, . . .	8	2
Essex, . . .	12	16	Norfolk, . . .	6	10
Middlesex, . . .	26	11	Bristol, . . .	4	12
Worcester, . . .	19	10	Plymouth, . . .	6	6
Hampshire, . . .	2	3	Barnstable, . . .	2	5
Hampden, . . .	1	10	Dukes and Nantucket, . . .	0	2
Franklin, . . .	7	0			

The changes of votes were as follows: Messrs. Collins of Boston and Cushing of Holliston voted "yea" on the third reading and "nay" afterwards; Messrs. Drew of Plymouth and Freeman of New Marlborough voted "yea" on the third reading, "nay" on the engrossment, and did not vote on the enactment; Mr. Crane of Stoughton voted "nay" on the third reading and engrossment, and "yea" on the enactment; Mr. Swain of Easton voted "yea" on the third reading, did not vote on the engrossment, and voted "nay" on the enactment.

The following gentlemen who did not vote on the third reading afterwards voted as follows: *Yeas*, Messrs. Blackington of Attleborough, Bird of Chelsea, Fay, Hill, Train and Whitney of Boston, Seaver and Standwood of Roxbury, Wardwell of Swampscott, Wing of Uxbridge, and Wright of Lawrence. *Nays*, Messrs. Bangs of Eastham, Bates of East Bridgewater, Brown of Granville, Chapin of Granby, Hathaway of Charlton, Matheson, Pierce, Tilton, Willson and Wilder of Boston, Pond of Franklin, Richmond of Lakeville, Tarbox of Lawrence, Towne of Topsfield, Whiting of Pembroke, and Wiley of North Andover.

I commend the lists of the yeas and nays to the careful study of the tax-payers and voters of the State. Taking from the list of yeas the names of representatives from towns lying on the Fitchburg, Vermont and Massachusetts, and Troy and Greenfield Railroads, it will be seen that Suffolk and Berkshire are the only counties which gave majorities for the tunnel. We readily understand how towns under the influence of those selfish corporations should vote as they did; but the people of the Eastern and Southern counties will naturally ask why the representatives from those counties did not vote as solid against this swindle as Franklin County did in its favor.

From the "basis of taxation," the amount which each county and town will pay of the cost of the tunnel hereafter, even assuming that it will be completed with the five million appropriation, can easily be figured. I have shown that the cost upon that assumption will be over eight millions, and that the ultimate cost of completing it, *from this time*, will be twelve or fifteen millions. Now, multiplying by eight the amount paid by each county or town of the tax on one million you have the amount to be paid by each county or town, on the assumption that five millions with interest will finish the tunnel. Multiplying each of these amounts by twelve or fifteen, you have the amount each pays of the ultimate cost.

But this is not the whole or the worst of the burden which this wretched job imposes upon the people. Suppose the tunnel is finished in seven years with this appropriation. It will then have cost, *from the beginning*, nearly sixteen millions, including interest. The interest on this will be a million annually, and this will be a perpetual burden, resting upon us and our posterity forever. If the debt is not then paid, it is obvious that the burden of interest continues; if the debt should then be paid, the whole amount of principal and interest paid up to that time will constitute a fixed investment, upon which interest must be paid forever; and for this obvious reason, that the whole cost and interest will have been sunk—no income, as I have abundantly shown, ever accruing from the enterprise, except, possibly, upon two or three millions. And if the cost shall be increased, as I have shown it will, the annual burden will be proportionally increased.

To illustrate the burdens which those who voted for this appropriation imposed upon their constituents, let us look at a few figures. The senator from the Island District, one senator from Plymouth, two from Norfolk, three from Essex, voted "yea;" the following table shows the amount of taxation which their votes aided to impose upon the people:

	Tax on \$8,000,000.	Tax on \$15,000,000.	Permanent annual tax for interest.
Island District, . . . .	\$38,720 00	\$72,600 00	\$1,840 00
Plymouth County, . . . .	254,720 00	477,600 00	31,840 00
Norfolk, deducting Roxbury, .	567,360 00	1,063,800 00	70,920 00
Essex County, . . . .	762,000 00	1,428,750 00	95,250 00

The following table gives similar figures for a few of the towns whose representatives voted "yea:"—

	Tax on \$8,000,000.	Tax on \$15,000,000.	Permanent annual tax for interest.
Abington, . . . . .	\$29,680 00	\$55,650 00	\$3,710 00
Braintree, . . . . .	14,320 00	26,850 00	1,790 00
Randolph, . . . . .	25,280 00	47,400 00	3,160 00
Provincetown, . . . . .	13,920 00	26,100 00	1,740 00
Dorchester, . . . . .	95,520 00	179,100 00	11,940 00
Canton,* . . . . .	18,240 00	33,200 00	2,280 00
Milton, . . . . .	31,440 00	58,950 00	3,930 00
Sharon, . . . . .	6,320 00	11,850 00	790 00
Walpole, . . . . .	9,760 00	18,300 00	1,220 00

\* With the other towns in the Eleventh Norfolk District *misrepresented* by Mr. Leavitt of Canton.

Voters of Massachusetts! Carry out these figures for every town and county. I make no sectional appeal. I know you will cheerfully submit to taxation for purposes which benefit any portion of the State. But when you remember that this expenditure benefits no section; that it develops the resources of no section; that it brings no new traffic to Boston; that it only puts money in the pockets of two railroad corporations, look well to your candidates for senators and representatives.



## THE LOBBY

is well described in the following extracts from an article in the "Springfield Republican" of June 13:—

"First, as to the *personnel* of the lobby. The chief man of them all is E. D. Foster, of Cheshire, a rough, tobacco-chewing Yankee, who was cut out for a first-rate horse jockey, but is probably spoiled now for any honest (?) occupation. His chief assistant and fogleman is Robert C. Nichols, of Boston, usually called 'Bob' for short, and Charles Porter. The lobby assignation house is at No. 5 Avon Place, a quiet, if not respectable locality, leading off from Washington Street, near the Theatre Comique. The proprietor of the house is Charles Hayward, formerly a lawyer of Springfield, or perhaps it would be more correct to say, the proprietor is Mrs. Hayward, his wife. In this house the lobby have rooms, and there the members of the legislature are invited to a 'free and easy' every Tuesday and Thursday evening during the session. There 'Gen' Foster and 'Bob' are always to be found, one attending at the door while the other pours out the liquors. From eight o'clock in the evening till twelve or two o'clock at night, members of the legislature come and go. Liquors and cigars are plenty and free, and there are facilities for a hand at cards, for all who like, so that it is no wonder all get pretty jolly, and no remark is excited when the president of the Senate joins the model farmer from Bolton, Mr. Howe, in a jovial song or dance. On breaking up, each member is reminded that a 'little matter' is coming up to-morrow, which it is important to have passed, and the little matter always passes. It is said that \$2,500 a year rent is paid for the place, and so anxious are some of the members to have it kept up, that they even contribute to its support. For instance, this year, Mr. Howe, of Bolton, is put down for \$200, and doubtless he will get his money back in some way. This is the place where President Clark of the agricultural college was wont to refresh himself in former times after his arduous labors in behalf of the prohibitory law, and here is where the senator from Eastern Hampden, Mr. Alexander, has taken those degrees in sanctity that entitled him to canonization at the hands of the North Adams people, assembled last week to have a jollification over the success of the tunnel. Here it is claimed that thirty of the forty senators, including the president, have had their convivial headquarters during the past session, and three-fourths of the House have been more or less constant attendants. If

Berkshire people want to know more about this place, let them ask one of the Pittsfield representatives, and the people of Franklin may apply to their senator.

"For this lobby, with its corrupting influences, Massachusetts is indebted to the Hoosac Tunnel. Fifteen years ago it was unknown. Now, so arranged and systematized is the business, that when the regular hands can't do the work, Adams and Westfield, not to mention other places, are prompt to send assistance. And so bold have these fellows become that they do not confine themselves to the legislative halls, but even invade the executive chamber and ply His Excellency with their arts and arguments.

"The tunnel interest does not pay the lobby much money, directly. But the lobby works with and for it, and always has, for the influence it can obtain to push other things with, and which will pay. As far as the tunnel itself is concerned, it is put through on the 'you-tickle-me-and-I'll-tickle-you' principle. The principal business of Mr. Towne of Fitchburg, and Mr. Thayer of North Adams, and other tunnel managers, the past session, has been to trade off the votes of themselves and their followers for other measures, till, starting with a minority, they were able at the close of the session to carry anything they wished with a high hand, and command the support of members from all parts of the State.

"It has got to that now that everything and every man that will not pay tribute to the tunnel and the lobby are put down in short metre, while all measures that will are put through with a rush. This year more than ever,

'He sails to port who sails with me,'

has been the boast of the tunnel and the lobby interest. That iniquitous measure, the Maverick East Boston Bridge project, never would have gone through, especially over the governor's veto, if its friends had not promised to vote for the tunnel. It is notorious that Towne of Fitchburg, and Tompkins of East Boston, made the bargain. The appropriation for Provincetown Harbor would have been voted down if the south shore folks had not gone for the tunnel. The permission given to the towns along the line of the Williamsburg and North Adams Railroad to take stock in the enterprise would have been withheld, had not the advocates of that measure given in their adherence to the tunnel. Mr. Plunkett of Pittsfield, an old line democrat, went to Boston, determined to oppose all appropriations, especially the tunnel. If he had done so actively, does any one suppose he would have been made State director of the Western Railroad, and could have carried the bill for the removal of the Berkshire County buildings to Pittsfield?



He voted against the tunnel, indeed, if he voted at all; but why didn't he make his promised speech against it, and what did he do with the facts and figures furnished him for that purpose? Are there any persons green enough to suppose the appropriation of \$40,000 for the Agricultural College at Amherst could have been carried on 'its merits,' if Mr. Ward of that town had not in turn supported the tunnel? If so, let me disabuse their minds at once. Fussy little Mr. Mixter of Hardwick, an ardent opponent of the tunnel heretofore, who made a speech against it in 1854, and who has been a going to stop this squandering of the people's money all along, became a sudden convert to the tunnel this year, and after getting all his available means into government bonds before the first of May, and thus beyond the reach of taxation, voted five millions of other people's money for the tunnel, without flinching. Was it to pay for being put with Mr. Plunkett into the directorship of the Western Railroad? If that was all, he sold out cheap. Mr. Crittenden of Otis may have supported the tunnel on principle, but it is more than supposed that he did it, and his friends with him, more to get through the appropriation for the Lee and New Haven Railroad than anything else. The House virtuously voted, one day, not to buy a thousand copies of General Schouler's five-dollar history of 'Massachusetts in the Rebellion.' The mistake was discovered and the vote promptly changed the next day. It is needless to add that Senator Schouler has cordially supported the tunnel with voice and vote. Last year the vote of three millions in aid of the Hartford and Erie Railroad was put through by the tunnel people, for a consideration, of course, and as a curious illustration of how things go here, it may be added that the Hartford and Erie interest took up and carried the loan to the North Adams and Williamsburg Railroad along with its own bill, and without expense to the latter corporation, who put in their request late, and had no particular claims or hopes.

"But why multiply instances? If I have not given enough to show honest people how log-rolling and corruption prevail at Boston, let them apply to their representative for more. I will only add that it is a fact that at the last end, sixteen members of the House were bought for the tunnel by the promise that the per diem should be increased to \$6 a day, and this bargain was kept in the lower branch. But to the credit of Senator Bowerman of Berkshire, it should be said that, though a friend of the tunnel, he refused to perfect the swindle in the upper house. As an illustration of how everything was killed that did not bow down to the tunnel Baal, notice the refusal to increase the salary of the secretary of the board of state charities, a most worthy officer, and whose salary should have been increased as well as that of other officials at the State House. But the bill was introduced and



advocated by Mr. Walker, of Springfield, an opponent of the tunnel. At the enactment of the five million appropriation bill for the tunnel, in the House, was the critical time, and the point where its friends were in most fear. Then a tunnel advocate offered Mr. Walker of Springfield sufficient votes to defeat the Hartford and New Haven anti-consolidation bill, if Mr. Walker would forbear to make his intended attack on the tunnel bill. The bargain was not consummated, of course, and the fate of the Hartford and New Haven Railroad bill is too fresh in mind to be further mentioned.

"But I must pause here, though not for want of material, I assure you ; but I have already said enough to call the attention of the people of Massachusetts to the chicanery and corruption which prevails at the capital, and that is all that is necessary. It rests with them to say whether our political and material interests shall be left any longer to the control of men who,

‘For every inch that is not fool, is rogue,’

and who are

‘Resolved to ruin or to rule the State,’

evidently not caring much which. Can the people, can the Republican party stand this thing any longer? Isn't it about time to be looking out for a Hercules who will undertake the job of cleaning out the Augean stable in Avon Place?"